SEQ ID NO:	Predicted beginning nucleotide location corresponding to first amino acid residue of amino acid sequence	Predicted end nucleotide location corresponding to first amino acid residue of amino acid sequence	Amino acid segment containing signal peptide (A=Alanine, C=Cysteine, D=Aspartic Acid, E=Glutamic Acid, F=Phenylalanine, G=Glycine, H=Histidine, I=Isoleucine, K=Lysine, L=Leucine, M=Methionine, N=Asparagine, P=Proline, Q=Glutamine, R=Arginine, S=Serine, T=Threonine, V=Valine, W=Tryptophan, Y=Tyrosine, X=Unknown, *=Stop Codon, /=possible nucleotide deletion, \=possible nucleotide insertion)
6675	277	1678	GNWPTERMAFLDNPTIILAHIRQSHVTSDDTGMCEMVLIDHDVD LEKIHPPSMPGDSGSEIQGSNGETQGYVYAQSVDITSSWDFGIR RRSNTAQRLERLRKERQNQIKCKNIQWKERNSKQSAQELKSLFE KKSLKEKPPISGKQSILSVRLEQCPLQLNNPFNEYSKFDGKGHV GTTATKKIDVYLPLHSSQDRLLPMTVVTMASARVQDLIGLICWQ YTSEGREPKLNDNVSAYCLHIAEDDGEVDTDFPPLDSNEPIHKF GFSTLALVEKYSSPGLTSKESLFVRINAAHGFSLIQVDNTKVTM KEILLKAVKRRKGSCKVSGSRADGVFEEDSQIDIATVQDMLSSH HYKSFKVSMIHRLRFTTDVQL/GCALFPGVLRKRAAPVDCLRPS ADTWRQEQIGCCGAACAALRS*DSHKC*EGISGDKVEIDPVTNQ KASTKFWIKQKPISIDSDLLCAC\DLAEE
6676	277	1678	GNWPTERMAFLDNPTIILAHIRQSHVTSDDTGMCEMVLIDHDVD LEKIHPPSMPGDSGSEIQGSNGETQGYVYAQSVDITSSWDFGIR RRSNTAQRLERLRKERQNQIKCKNIQWKERNSKQSAQELKSLFE KKSLKEKPPISGKQSILSVRLEQCPLQLNNPFNEYSKFDGKGHV GTTATKKIDVYLPLHSSQDRLLPMTVVTMASARVQDLIGLICWQ YTSEGREPKLNDNVSAYCLHIAEDDGEVDTDFPPLDSNEPIHKF GFSTLALVEKYSSPGLTSKESLFVRINAAHGFSLIQVDNTKVTM KEILLKAVKRRKGSCKVSGSRADGVFEEDSQIDIATVQDMLSSH HYKSFKVSMIHRLRFTTDVQL/GCALFPGVLRKRAAPVDCLRPS ADTWRQEQIGCCGAACAALRS*DSHKC*EGISGDKVEIDPVTNQ KASTKFWIKQKPISIDSDLLCAC\DLAEE
6677	277	1678	GNWPTERMAFLDNPTIILAHIRQSHVTSDDTGMCEMVLIDHDVD LEKIHPPSMPGDSGSEIQGSNGETQGYVYAQSVDITSSWDFGIR RRSNTAQRLERLRKERQNQIKCKNIQWKERNSKQSAQELKSLFE KKSLKEKPPISGKQSILSVRLEQCPLQLNNPFNEYSKFDGKGHV GTTATKKIDVYLPLHSSQDRLLPMTVVTMASARVQDLIGLICWQ YTSEGREPKLNDNVSAYCLHIAEDDGEVDTDFPPLDSNEPIHKF GFSTLALVEKYSSPGLTSKESLFVRINAAHGFSLIQVDNTKVTM KEILLKAVKRRKGSQKVSGSRADGVFEEDSQIDIATVQDMLSSH HYKSFKVSMIHRLRFTTDVQL/GCALFPGVLRKRAAPVDCLRPS ADTWRQEQIGCCGAACAALRS*DSHKC*EGISGDKVEIDPVTNQ KASTKFWIKQKPISIDSDLLCAC\DLAEE
6678	221	865	GPSNQSSGSLSLIVTGCSSYWS*INDTCTILRVLSSNFGRQ*LR PFPCSQLPMSQGCLWHLDCCCPWVPYIPGQQWRKGRQRMRN*QS LLGSDQESVGLEDLCVFVNFLLHVLLGLFP*PHELFLLPVVDLG FLFPLLLQGGCHCLVLPANLVSQAPQIGKLSCRLQTHDLEGSRN HHPLFLVVGRWEAVKHLETVQSGLASLGFVGQHTSHGPP
6679	2	786	LEFARGAMPFLGODWRSPGQNWVKTVDGWKRFLDEKSGSFVSDL SSYCNKEVYNKENLFNSLNYD/SCSQEEKEGHAE*QNQNS\DFH QEKWEYVHKGSTKERHGYCTLGEAFNRLDFSTAILDSRRFNYVV RLLELIAKSQLTSLSGIAQKNFMNILEKVVLKVLEDQQNITLIR ELLQTLYTSLCTLVKRVGKSVLVGNINMWVYRMETILHWQQQLN NIQITRVSGQAQPPPGSGSLHRDTGQTRQDFEPTPVTEESGLF
6680	1498	2951	PLCTLPLMPSALPGWAGERWEKQWPLA/PGPGTWQTPVGSISEE P\RKNEPDTHCPRGEARPEV*HLPKPHSPGSEGAEIQTSA*ALP /NQVSPPQPM*GAEENGDQRGGKEBAGEELHRSSSGLTAAPGFP EVHRNLQTFPGLPSRGGGP/GGAGTQGSWAPGEQPP/SPLLPAS MQRSQAGLPGWEAGLVESPTHHIPALRPSGTNATGEAFPSTTCS SGP\PAPPGPTGLRPGGGSSSGGHG**PGLPVGKV\GALGAAQD PQSQGRGPTQGTVGTEMLLSGLGSAKACPAARPAVP*LPSDPAS TIPKKGTRGFGEGPGVLQERNRWVVGRAQGFTSADAAGTAPPGV *LPAPLSQPPGATEPQVRACGMAPPSPGTSGRLVANGRHPGPQV AQGCPPGAGCWGSQPRGSQRCPRTYTHSPLGHGRAPCPRRCWH* WQDPPSSPRTGCLPGIPARQAYSAPRTRSRPGIRTGRAAYGFIR FQGGGGG

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SEQ ID NO:	Predicted beginning nucleotide location corresponding to first amino acid residue of amino acid sequence	Predicted end nucleotide location corresponding to first amino acid residue of amino acid sequence	Amino acid segment containing signal peptide (A=Alanine, C=Cysteine, D=Aspartic Acid, E=Glutamic Acid, F=Phenylalanine, G=Glycine, H=Histidine, I=Isoleucine, K=Lysine, L=Leucine, M=Methionine, N=Asparagine, P=Proline, Q=Glutamine, R=Arginine, S=Serine, T=Threonine, V=Valine, W=Tryptophan, Y=Tyrosine, X=Unknown, *=Stop Codon, /=possible nucleotide deletion, \=possible nucleotide insertion)
6681	1169	511	INYIYYNQQORAFHELK\EKLMSAPALGLPDLTKLFTLHVSERE KMTVGVLTQTVGPWSRPGAYLSKQLDGVSKGWPPCPRALAATAL LAQEADELTLRQNLNRKSPHA\VVTLINTKGHH*LINARLTRYQ TLLCENPHKTIEVSNT/LNPATLLLVTESPVKHNCLEVLDSVYS SRPNLRDHP*TSVDWELYVDGSGFANPCKVTLKKETSPAPVTPR S
6682	109	1238	TVLCGAMQVSSLNEVKIYSLSCGKSLPEWLSDRKKRALQKKDVD VRRRIELIQDFEMPTVCTTIKVSKDGQYILATGTYKPRVRCYDT YQLSLKFERCLDSEVVTFEILSDDYSKIVFLHNDRYIEFHSQSG FYYKTRIPKFGRDFSYHYPSCDLYFVGASSEVYRLNLEQGRYLN PLQTDAAENNVCDINSVHGLFATGTIEGRVECWDPRTRNRVGLL D\AP*TVSQQIQR*TSLPTISALKFN\GALTMAVGTTTGQVLLY DLRSDKPLLVKDHQYGLPIKSVHFQDSLDLILSADSRIVKMWNK NSGKIFTSLEPEHDLNDVCLYPNSGMLLTANETPKMGIYYIPVL GPAPRWCSFLDNLTEELEENPESNE
6683	109	1238	TVLCGAMQVSSLNEVKIYSLSCGKSLPEWLSDRKKRALQKKDVD VRRRIELIQDFEMPTVCTTIKVSKDGQYILATGTYKPRVRCYDT YQLSLKFERCLDSEVVTFEILSDDYSKIVFLHNDRYIEFHSQSG FYYKTRIPKFGRDFSYHYPSCDLYFVGASSEVYRLNLEQGRYLN PLQTDAAENNVCDINSVHGLFATGTIEGRVECWDPRTRNRVGLL D\AP*TVSQQIQR*TSLPTISALKFN\GALTMAVGTTTGQVLLY DLRSDKPLLVKDHQYGLPIKSVHFQDSLDLILSADSRIVKMWNK NSGKIFTSLEPEHDLNDVCLYPNSGMLLTANETPKMGIYYIPVL GPAPRWCSFLDNLTEELEENPESNE
6684	113	527	GLRGGTSRGRAGREPEFAAGVLCVVAGFCQSPCPPGGRGREAPA PP\SGRRHA*RPA*WLGGPGGDSGGREEGGS/GELQRAMESKMG ELPLDINIQEPRWDQSTFLGRARHFFTVTDPRNLLLSGAQLEAS RNIVQNYR
6685	256	1473	KLLGDNFEGFCNKFELSDSENGSNS*QSPL\FDRLFDPDPQKVL QGVIDMKNAVIGNNKQKANLIVLGAVPRLLYLLQQETSSTELKT ECAVVLGSLAMGTENNVKSLLDCHIIPALLQGLLSPDLKFIEAC LRCLRTIFTSPVTPEELLYTDATVIPHLMALLSRSRYTQEYICQ IFSHCCKGPDHQTILFNHGAVQNIAHLLTSLSYKVRMQALKCFS VLAFENPQVSMTLVNVLVDGELLPQIFVKMLQRDKPIEMQLTSA KCLTYMCRAGAIRTDDNCIVLKTLPCLVRMCSKERLLEERVEGA ETLAYLIEPDVELQRIASITDHLIAMLADYFKYPSSVSAITDIK RLDHDLKHAHELRQAAFKLYASLGANDEDIRKKVSLGEGRPPVL TASRQGVTST
6686	310	927	DSVTFDDLAVDFTPKEWTLLDPTQRNLYRDVMLENYKNLATVGY QLFKPSLISWLEQEESRTVQRGDFQASEWKVQLKTKELALQQDV LGEPTSSGIQMIGSHNGGEVSDVKQCGDVSSEHSCLKTHVRTQN SENTFECYLYGVDFLTLHKKTSTGEQRSVFSHVWKKPSSLNPDV VCQKNRCTRKKKAF*LQLTLGKSFH*SIHT
6687	181	915	EAMLEAPYKKEEDEQORKEVKKDYPSNTTSSTSNSGNETSGSST IGETSNRSRDRDRYRRRNSRSRSPGRQCRHRSRSWDRRHGSESR SRDHRREDRVHYRSPPLATGEPVDNLSPEERDARTVFCMQLAAR IRPRDLEDFFSAVGKVRDVRIISDRNSRRSKGIAYVEFCEIQSV PLAIGLTGQRLLGVPIIVQASQAEKNRLAAMANNLQKGNGGPMR LYVGSLHFNITEDMLRGIFEPFGKV
6688	1025	1	AEVPNYPRVFHKCPDSCWRFKFQPIQLQPYILLSFSSEKPPISF SEPGLPR/SATARMATAAAPPNSSIDLPSDSGMGFISPAGDSLD LPSDGGTGFFSLAGDSSSTRLSSLAFISFSLSSVSVGSSAGTTS STSVGSVVAAFTSSSSSSTNRDVAGLDFSTVITSVSGSLVPSRE VAVICGSKGAGASGSASCSSRAGKTTEATAASSMPSGTSSFSTC TMSELEELFSLPSPAPLLSKLFTSSGSIAICCQDSGPSDTGRLS VCQLWLADSDTGKLSDCQEVVTVGDSGGLTCPELSLGRM*MSLL

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			SSAVIPGYSSSSDSRLNTVPTVDLLCPFQTKSST
6689	640	1299	SSSASYATSATSISDTAFSGSLKLKHGLLSALDSSSRTS*STSS AEDSTFRICSPSVSDTSSDSSGSKDNVLILFSKVSI*SCFSLSS FFSDSISFCFSSSSFCKR*FVSSKVSQNALLSSRLSNGPGGSSK QRNSLTARQLAMSL*ATKF*RNACNPNCLSSKKSAL*LSLNQRF GGSASRKPGNISFNSQKCSALSYCCNFVIKPREVSVSSENYPAF
6690	1	442	GTRGKMAATLGPLGSWQQWRRCLSARDGSRMLLLLLLLLGSGQGP QQVGAGOTFEYLKREHSLSKPYQGVGTGSSSLWNLMGNAMVMTQ YIRLTPDMQSKQGALWNRVPCFLRDWELQVHFXIHGQGKKNL\H GDGLAIWYTKDRMQP
6691	287	1401	LKTETSEEKARRYKDRPSQLNAVFQEQKKMIQAQESITLEDVAV DFTWEEWQLLGAAQKDLYRDVMLENYSNLVAVGYQASKPDALFK LEQGEQLWTIEDGIHSGACSDIWKVDHVLERLQSESLVNRRKPC HEHDAFENIVHCSKSQFLLGQNHDIFDLRGKSLKSNLTLVNQSK GYEIKNSVEFTGNGDSFLHANHERLHTAIKFPASQKLISTKSQF ISPKHQKTRKLEKHHVCSECGKAFIKKSWLTDHQVMHTGEKPHR CSLCEKAFSRKFMLTEHQRTHTGEKPYECPECGKAFLKKSRLNI HQKTHTGEKPYICSECGKGFIQKGNLIVHQRIHTGEKPYICNEC /GKGFIQKTCLIAHQRFHTER
6692	176	939	WIKEGELSLWERFCANIIKAGPMPKHIAFIMDGNRRYAKKCQVE RQEGHSQGFNKLAETLRWCLNLGILEVTVYAFSIENFKRSKSEV DGLMDLARQKFSRLMEEKEKLQKHGVCIRVLGDLHLLPLDLQEL IAQAVQATKNYNKCFLNVCFAYTSRHEISNAVREMAWGVEQGLL DPSDISESLLDKCLYTNRSPHPDILIRTSGEVRLSDFLLWQTSH SCLVFQPVLWPEYTFWNLFEAILQFQMNHSVLQK
6693	176	939	WIKEGELSLWERFCANIIKAGPMPKHIAFIMDGNRRYAKKCQVE RQEGHSQGFNKLAETLRWCLNLGILEVTVYAFSIENFKRSKSEV DGLMDLARQKFSRLMEEKEKLQKHGVCIRVLGDLHLLPLDLQEL IAQAVQATKNYNKCFLNVCFAYTSRHEISNAVREMAWGVEQGLL DPSDISESLLDKCLYTNRSPHPDILIRTSGEVRLSDFLLWQTSH SCLVFQPVLWPEYTFWNLFEAILQFQMNHSVLQK
6694	292	813	SLLLHLAPPGAYTPSQPLSSVSTETASSVRRQAAESRQHELPVR EVHSLGQILPQDGLTAEAGPPEAQDPWGSPGISLPAAHIGFAAA LAVGPSGCHTEP\FDEVWPSLFLGDAYAARDKSKLIQLGITHVV NAAAGKFQVDTGAKFYRGMSLEYYGIEADDNPFFDLSVYFLP
6695	292	813	SLLLHLAPPGAYTPSQPLSSVSTETASSVRRQAAESRQHELPVR EVHSLGQILPQDGLTAEAGPPEAQDPWGSPGISLPAAHIGFAAA LAVGPSGCHTEP\FDEVWPSLFLGDAYAARDKSKLIQLGITHVV NAAAGKFQVDTGAKFYRGMSLEYYGIEADDNPFFDLSVYFLP
6696	1	782	PRVRGRVGERWAFLSVPAAMSSEMEPLLLAWSYFRRRKFQLCAD LCTQMLEKSPYDQAAWILKARALTEMVYIDEIDVDQEGIAEMML DENAIAQVPRPGTSLKLPGTNQTGGFSQAVRPITQAGRPITGFL RPSTQSGRPGTMEQAIRTPRTAYTARPITSSSGRFVRLGTASML TSPDGPFINLSRLNLTKYSQKPKLAKALIEYIFHHENDVKTALD LAALSTEHSQYKDWWWK/DQIEKCYYRVGMYREAEKQIKSS
6697	3	782	PPLFLRRLNSRALRPGSRKVMAVVPASLSGQDVGSFAYLTIKDR IPQILTKVIDTLHRHKSEFFEKHGEEGVEAEKKAISLLSKLRNE LQTDKPFIPLVEKFVDTDIWNQYLEYQQSLLNESDGKSRWFYSP WLLV\ECYMYRRIHEAI\IQSPPIDYFDVFKESKEQNFYGSQES IIALCTHLQQLIRTIEDLD\ENQLKDEFFKLLQISLWGEISVDL SL\SGGESSSQNTNVLNSLEDLKPFILLNDMEHLWSLLSNCK
6698	668	754	VGSCACAGSCKCKECKCTSCKKSECRAFP
6699	325	492	EGELP/PARRVLPRAMTASAQPRGRRPGVGVGVVVTSCKHPRCV LLGKRKGSVGAGSFQLPGGHLEFGETWEECAQRETWEEAALHLK NVHFASVVNSFIEKENYHYVTILMKGEVDVTHDSEPKNVEPEKN

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			ESKRIIYNHAFFFQESKWSGGILQ
6700	1096	1392	TQCWRSSTPGMRTHFRTQP/RLECGQGFSQQENGHCMDTNECIQ FPFVCPRDKPVCVNTYGSYRCRTNKKCSRGYEPNEDGTACVERT LLLGLCNLLGK
6701	2	1485	AAAGPRTRVRRAAAFEGQPSPSPGLGPTSDKAAAPRTPKRRRLW RQRQ/HPAMLCYVTRPDAVLMEVEVEAKANGEDCLNQVCRRLGI IEVDYFGLQFTGSKGESLWLNLRNRISQQMDGLAPYRLKLRVKF FVEPHLILQEQTRHIFFLHIKEALLAGHLLCSPEQAVELSALLA QTKFGDYNQNTAKYNYEELCAKELSSATLNSIVAKHKELEGTSQ ASAEYQVLQIVSAMENYGIEWHSVRDSEGQKLLIGVGPEGISIC KDDFSPINRIAYPVVQMATQSGKNVYLTVTKESGNSIVLLFKMI STRAASGLYRAITETHAFYRCDTVTSAVMMQYSRDLKGHLASLF LNENINLGKKYVFDIKRTSKEVYDHARRALYNAGVVDLVSRNNQ SPSHSPLKSSESSMNCSSCEGLSCQQTRVLQEKLRKLKEAMLCM VCCEEEINSTFCPCGHTVCCESCAAQLQVGESAAHFCLQPHLSL LLTGSRSQVLAR
6702	397	1971	PLAKFLKLDLVNVLCLPMEDVFLFYRTCFCSMGLGSSCHLSLPK RAEALLCSRKATVVRDLVAVRMAEEQEFTQLCKLPAQPSHPHCV NNTYRSAQHSQALLRGLLALRDSGILFDVVLVVEGRHIEAHRIL LAASCDYFKGMFAGGLKEMEQEEVLIHGVSYNAMCQILHFIYTS ELELSLSNVQETLVAACQLQIPEIIHFCCDFLMSWVDEENILDV YRLAELFDLSRLTEQLDTYILKNFVAFSRTDKYRQLPLEKVYSL LSSNRLEVSCETEVYEGALLYHYSLEQVQADQISLHEPFKLLET VRFPLMEAEVLQRLHDKLDPSPLRDTVASALMYHRNESLQPSLQ SPQTELRSDFQCVVGFGGIHSTPS\MSSATRPKYLNPLLGEWKH FTASLAPRMSNQGIAVLNNFVYLIGGDNNVQGFRAESRCWRYDP RHNRWFQIQSLQQEHADLSVCVVGRYIYAVAGRDYHNDLNAVER YDPATNSWAYVAPLKREVYAHAGATLEGKMYITCGRKGRIT
6703	45	1244	GVGPRAAAMPLELELCPGRWVGGQHPCFIIAEIGQNHQGDLDVA KRMIRMAKECGADCAKFQKSELEFKFNRKALERPYTSKHSWGKT YGEHKRHLEFSHDQYRELQRYAEEVGIFFTASGMDEMAVEFLHE LNVPFFKVGSGDTNNFPYLEKTAK/TRGWHSVLRDVCGVQLNDE TSSWDVLGRVRTSKEKVLMVLVLDYSGRPMVISSGMQSMDTMKQ VYQIVKPLNPNFCFLQCTSAYPLQPEDVNLRVISEYQKLFPDIP IGYSGHETGIAISVAAVALGAKVLERHITLDKTWKGSDHSASLE PGELAELVRSVRLVERALGSPTKQLLPCEMACNEKLGKSVVAKV KIPEGTILTMDMLTVKVGEPKGYPPEDIFNLVGKKVLVTVEEDD TIMEE
6704	82	1007	TMNTRNRVVNSGLGASPASRPTRDPQDPSGRQGELSPVEDQREG LEAAPKGPSRESVVHAGQRRTSAYTLIAPNINRRNEIQRIAEQE LANLEKWKEQNRAKPVHLVPRRLGGSQSETEVRQKQQLQLMQSK YKQKLKREESVRIKKEAEEAELQKMKAIQREKSNKLEEKKRLQE NLRREAFREHQQYKTAEFL/RQTEHRIARQKCLSKCCLWPTILN MGQKLGLQ\DSLKAEENRKLQKMKDEQHQKSELLELKRQQQEQE RAKIHQTEHRRVNNAFLDRLQGKSQPGGLEQSGGCWNMNSGNSW GI
6705	2	786	RLCRNSARVPCGWSASRSLGEGAGFIGPLRGPHPRAGGTGTSFT SYKRKGGIMSTIAAFYGGKSILITVATGFLGKELMEKLFRTSPD LKVIYILVRPKAGQTLQHRVFQILDSKLFEKVIEVRPNVHEKIR AIYADLNQNDFAISKEDMQELLSCTNIIFHCAATVRFDDTLRHA VQLNVTATRQLLLMASQMPKLEAFIHISTAYSNCNLKHIDEVIY PCPVEPKKIIDSLEW\LDDAIIDEITPKLIRDWPNIYTYTK
6706	130	531	PTHSSSSHSQEMLGKLNMLRNDGHFCDITIRVQDKIPRAHKVVL AACSDFFRTKLVGQAEDENKNVLDLHHVTVTGFIPLLEYAYTAT LSINTENIIDVLAAASYMQMFSVASTCSEFMKSSILWNTPNSQP EK

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6707	2233	1343	YWSGIGYELQHFHWRKFHFEKKGPPSTCQBRLYESRSRWPCIS* GMVVVGWTAVNGSW*GGQLRCVCVCTSHSSDSTRSSORASKCHS FFILSQ*KT*SSWENWVFAKYSRIYSYGHSCSKGRGD*DFK*NV SQAR*SRFCGLCNPCGHCGLDINLRGGSSPWTDKHSCVHNNLLC NRRVFSLLCEGPGHCYQGAVCREACAAASPGLDSAAEPHRLCEH TD*LPK*GPGYIQHFHCDSNILCILYNISFNLFSYSF*GVARYA C*RCHWYFEWLLYNHCGDILVACL*RRQL*SSQ
6708	115	1729	TVGSWSRSGRSPPVGRQLLLTGRGAQAAGSPQGGMALQVELVPT GEIIRVVHPHRPCKLALGSDGVRVTMESALTARDRVGVQDFVLL ENFTSEAAFIENLRRRFRENLIYTYIGPVLVSVNPYRDIQIYSR QHMERYRGVSFYEEPPHLLAVADTVYRALRTERRDQAVMISVES GAGKTDATKRLLQLYAETCPAPQRGGAVRDRLLQSNPVLEAFGN AKTLRNDNSSRFGKYMDVQFDFKGAPVGGHILSYLLEKSRVVHQ NHGERNFHIFYQLLEGGEEETLRRLGLERNPQSYLYLVKGQCAK VSSINDKSDWKVVRKALTVIDFTEDEVEDLLSIAASVLHLGNIH FAANEESNAQVTTENQLKYLTRLLSVEGSTLREALTHRKIIAKG EELLSPLNLEQAAYARDALAKAVYSRTFTWLVGKINRSLASKDV ESPSWRSTTVLGLLDIYGFEVFQHNSFEQFCINYCNEKLQQLFI ELTLKSEQEEYEAEGIAWEPVQYFNNKIICDLVEEKFKGII\SI LDE\ECLRPGE
6709	3	894	PPHEHLFPSGERGPFSFLVSRRGLGPGKMGKKGKKEKKGRGAEK TAAKMEKKVSKRSRKEEEDLEALIAHFQTLDAKRTQTVELPCPP PSPRLNASLSVHPEKDELILFGGEYFNGQKTFLYNELYVYNIRK DTWTKVDIPSPPPRRCAHQAVVVPQGGGQLWVFGGEFASPNGEQ FYHYKDLWVLHLATKTWEQVKSTGGPSGRSGHRMVAWKRQLILF GGFHESTRDYIYYNDVYAFNLDTFTWSKLSPSGTGPTFRSGCQ\ IPSLPRAASSVYGGYSKQRVKKDVDKGTRHSDMF
6710	158	980	RHKMTNYRVESSSGRAARKMRLALMGPAFIAAIGYIDPGNFATN IQAGASFGYQLLWVVVWANLMAMLIQILSAKLGIATGKNLAEQI RDHYPRPVVWFYWVQAEIIAMATDLAEFIGAAIGFKLILGVSLL QGAVLTGIATFLILMLQRRGQKPLEKVIGGLLLFVAAAYIVELI FSQPNLAQLGKGMVIPSLPTSEAVFLAAGVL\GATIMPHVI/YI WHSSLTQHLHGGSRQQRYSATKWDVAIAMTIAGPVNLAIMATAA SELNFYGHTGVA
6711	3	347	VTECKTMTCKMSQLERNI*TMINTLHHYSVKLGHPDTLIHGEFK ELVRTDLHNILMXENKNDQAI*HIMEDLDTNAHMQIIFKELIML MAMLTWSYHDNMHDADYGPGQQHRPG
6712	118	578	PHGQKRTRYPQVRAPGQOPQAQLAMALCLKQVFAKDKTFRPRKR FEPGTQRFELYKKAQASLKSGLDLRSVVRLPPGENIDDWIAVHV VDFFNRINLIYGTMAERCS*TSCPVMAGGPRYEYRWQDERQYRR PAKLSAPRYMALLMDWIESLI
6713	2485	3	QARGSDSEDGEFEIQAEDDARARKLGPGRPLPTFPTSECTSDVE PDTREMVRAQNKKKKKSGGFQSMGLSYPVFKGIMKKGYKVPTPI QRKTIPVILDGKDVVAMARTGSGKTACFLLPMFERLKTHSAQTG ARALILSPTRELALQTLKFTKELGKFTGLKTALILGGDRMEDQF AALHENPDIIATPGRLVHVAVEMSLKLQSVEYVVFDEADRLFE MGFAEQLQEIIARLPGGHQTVLFSATLPKLLVEPARAGLTEPVL IRLDVDTKLNEQLKTSFFLVREDTKAAVLLHLLHNVVRPQDQTV VFVATKHHAEYLTELLTTQRVSCAHIYSALDPTARKINLAKFTL GKCSTLIVTDLAARGLDIPLLDNVINYSFPAKGKLFLHRVGRVA RAGRSGTAYSLVAPDEIPYLLDLHLFLGRSLTLARPLKEPSGVA GVDGMLGRVPQSVVDEEDSGLQSTLEASLELRGLARVADNAQQQ YVRSRPAPSPESIKRAKEMDLVGLGLHPLFSSRPEEEELQRLRL VDSIKNYRSRATIFEINASSRDLCSQVMRAKRQKDRKAIARFQQ GQQGRQEQOEGPVGPAPSRPALQEKQPEKEEEEEAGESVEDIFS EVVGRKRQRSGPNRGAKRRREEARQRDQEFYIPYRPKDFDSERG

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			LSISGEGGAFEQQAAGAVLDLMGDEAQNLTRGRQQLKWDRKKKR FVGQSGQEDKKKIKTESGRYISSSYKRDLYQKWKQKQKID*S*L GRRRGILTRRRPRTEEVGEARPLAQAGCIPGPHAPRHPLQAESA LELKTKQQILKQRRRAQKAALSLQRWWPQAALCPQ
6714	169	1416	NNCQELLPPPPAPMAHPSGGAPAAGAAPMGPQYCVCKVELSVS GQNLLDRDVTSKSDPFCVLFTENNGRWIEYDRTETAINNLNPAF SKKFVLDYHFEEVQKLKFALFDQDKSSMRLDEHDFLGQFSCSLG TIVSSKKITRPLLLLNDKPAGKGLITIAAQELSDNRVITLSLAG RRLDKKDLFGKSDPFLEFYKPGDDGKWMLVHRTEVIKYTLDPVW KPFTVPLVSLCDGDMEKPIQVMCYDYDNDGGHDFIGEFQTSVSQ MCEARDSVPLEFECINPKKQRKKKNYKNSGIIILRSCKINRDYS FLDYILGGCQLMFTVGIDFTASNGNPLDPSSLHYINPMGTNEYL SAIWAVGQIIQDYDSDKMFPALGFGAQLPPDWKVSHEFAINFNP TNPFCSGVDGIAQAYSACLP
6715	32	493	GPAGAESGSLHCLPATVQALAGAAHSPHGGQPPRRGPLIGSGMP GKPKHLGVPNGRMVLAVSDGELSSTTGPQGQGEGRGSSLSIHSL PSGPSSPFPTEEQPVASWALSFERLLQDPLGLAYFTEFLKKEFS AENVTFWKACERFQQIPASDT
6716	1	176	GAGGPAPRSFGSEEPRAALERDKMSARAAAAKSTAMEETAIWEQ HTVTLIIRVSLCCSK
6717	115	896	LFAMSGFENLNTDFYQTSYSIDDQSQQSYDYGGSGGPYSKQYAG YDYSQQGRFVPPDMMQPQQPYTGQIYQPTQAYTPASPQPFYGNN FEDEPPLLEELGINFDHIWQKTLTVLHPLKVADGSIMNETDLAG PMVFCLAFGATLLLAGKIQFGYVYGISAIGCLGMFCLLNLMSMT GVSFGCVASVLGYCLLPMILLSSFAVIFSLQGMVGIILTAGIIG WCSFSASKIFISALAMEGQQLLVAYPCALLYGVFALISVF
6718	290	599	KQSSTVPGTILPSLKWHNSGLCKFPETGGKMTTFKEGLTFKDVA VIFTEEELGLLDPVQRNLYQDVMLENFRNLLSVGHHPFKHDVFL LEKEKKLDIMKTATQ
6719	1	691	PTRPEEQDREDGKCHKMEMNPISGNLNCDPIAMSQCSSDHGCET DLDSDDDKIEKPNNFMKDSASQDNGLSRKISRKRVCSSDSDSSL QVVKKSSKARTGLLRITRRCAATAANKIKLMSDVEDVSLENVHT RSKNGRKKPLHLACTTAKKKLSDCEGSVHCEVPSEQYACEGKPP DPDSEGSTKVLSQALNGDSDSEDMLNSEHKHRHTNIHKIDAPSK RKSSSVTSSG
6720	3	822	HEVAEEAGGTVYPQRGTMPGTKRFQHVIETPEPGKWELTGYEAA VPITEKSNPLTQDLDKADAENIVRLLGQCDAEIFQEEGQALSTY QRLYSESILTTMVQVAGKVQEVLKEPDGGLVVLSGGGTSGRMAF LMSVSFNQLMKGLGQKPLYTYLIAGGDRSVVASREGTEDSALHG IEELKKVAAGKKRVIVIGISVGLSAPFVAGQMDCCMNNTAVFLP VLVGFNPVSMARHPFPPPRILRSLTVFPSLRAPHYQITSLLFSM SVVTLISE
6721	3	822	HEVAEEAGGTVYPQRGTMPGTKRFQHVIETPEPGKWELTGYEAA VPITEKSNPLTQDLDKADAENIVRLLGQCDAEIFQEEGQALSTY QRLYSESILTTMVQVAGKVQEVLKEPDGGLVVLSGGGTSGRMAF LMSVSFNQLMKGLGQKPLYTYLIAGGDRSVVASREGTEDSALHG IEELKKVAAGKKRVIVIGISVGLSAPFVAGQMDCCMNNTAVFLP VLVGFNPVSMARHPFPPPRILRSLTVFPSLRAPHYQITSLLFSM SVVTLISE
6722	1	390	RSWSKRTWQALPMAVLFLLLFLCGTPQAADNMQAIYVALGEAVE LPCPSPSTLHGDEHLSWFCSPAAGSFTTLVAQVQVGRPAPDPGK PGRESRLRLLGNYSLWLEGSKEEDAGRYWCAVLGQHHNYQNW
6723	173	659	VCQYCTARMADFGISAGQFVAVVWDKSSPVEALKGLVDKLQALT GNEGRVSVENIKQLLQSAHKESSFDIILSGLVPGSTTLHSAEIL AEIARILRPGGCLFLKEPVETAVDNNSKVKTASKLCSALTLSGL

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			VEVKELQREPLTPEEVQSVREHLGHESDNL
6724	173	659	VCQYCTAEMADFGISAGQFVAVVWDKSSPVEALKGLVDKLQALT GNEGRVSVENIKQLLQSAHKESSFDIILSGLVPGSTTLHSAEIL AEIARILRPGGCLFLKEPVETAVDNNSKVKTASKLCSALTLSGL VEVKELQREPLTPEEVQSVREHLGHESDNL
6725	356	722	RRRTPPVILATMDDDLMLALRLQEEWNLQEAERDHAQESLSLVD ASWELVDFTPDLQALFVQFNDQFFWGQLEAVEVKWSVRMTLCAG ICSYEGKGGMCSIRLSEPLLKLRPRKDLVEVFFV
6726	98	714	HLQKMERKINRREKEKEYEGKHNSLEDTDQGKNCKSTLMTLNVG GYLYITQKQTLTKYPDTFLEGIVNGKILCPFDADGHYFIDRDGL LFRHVLNFLRNGELLLPEGFRENQLLAQEAEFFQLKGLAEEVKS RWEKEQLTPRETTFLEITDNHDRSQGLRIFCNAPDFISKIKSRI VLVSKSRLDGFPEEFSISSNIIQFKYFIK
6727	1	831	FRGMGDERPHYYGKHGTPQKYDPTFKGPIYNRGCTDIICCVFLL LAIVGYVAVGIIAWTHGDPRKVIYPTDSRGEFCGQKGTKNENKP YLFYFPNIVKCASPLVLLEFQCPTPQICVEKCPDRYLTYLNARSS RDFEYYKQFCVPGFKNNKGVAEVLRDGDCPAVLIPSKPLARRCF PAIHAYKGVLMVGNETTYEDGHGSRKNITDLVEGAKKANGVLEA RQLAMRIFEDYTVSWYWDIISLGIAMAMSLLFIILLRFLAGIMG RGMIIMGILVLGY
6728	486	935	FCSSWLRSLADSSLSWKMFLVGLTGGIASGKSSVIQVFQQLGCA VIDVDVMARHVVQPGYPAHRRIVEVFGTEVLLENGDINRKVLGD LIFNQPDRRQLLNAITHPEIRKEMMKETFKYFLREPRTSPRGKK HVPSALKEADSLMRRDT
6729	259	1191	VGLTGAQSGRTASMGRDQRAVAGPALRRWLLLGTVTVGFLAQSV LAGVKKFDVPCGGRDCSGGCQCYPEKGGRGQPGPVGPQGYNGPP GLQGFPGLQGRKGDKGERGAPGVTGPKGDVGARGVSGFPGADGI PGHPGQGGPRGRPGYDGCNGTQGDSGPQGPPGSEGFTGPPGPQG PKGQKGEPYALPKEERDRYRGEPGEPGLVGFQGPPGRPGHVGQM GPVGAPGRPGPPGPPGPKGQQGNRGLGFYGVKGGEKGDVGQPGPN GIPSDTLHPIIAPTGVTFHPDQYKGEKGSEGEPGIRGISLKGEE GIM
6730	784	1015	NMVDYYEVLGLQRYASPEDIKKAYHKVALKWHPDKNPENKEEAE RKFKEVAEAYEVLSNDEKRDIYDKYGTEGLNEF
6731	1	446	GIRKRLHGAVVPRVEVGCPWETRESEGVHLERPTSPLKNNDEGS LDIYAGLDSAVSDSASKSCVPSRNCLDLYEEILTEEGTAKEATY NDLQVEYGKCQLQMKELMKKFKEIQTQNFSLINENQSLKKNISA LIKTARVEINRKDEEI
6732	102	1205	GRWQRRPPPPSPPLWCLQPGGGSDPQQLTQLRHCLSHSPQDTPW AQRQVCYTAATTQAAAPATRNCLPDHSGHRPTPPRSHRHHRQEN LGSIKPSSRSTKATSTTMAGDGRRAEAVREGWGVYVTPRAPIRE GRGRLAPQNGGSDAPAYRTPPSRQGRREVRFSDEPPEVYGDFE PLVAKERSPVGKRTRLEEFRSDSAKEEVRESAYYLRSRQRRQPR PQETEEMKTKRTTRLQQQHSEQPPLQPSPVMTRRGLRDSHSSEE DEASSQTDLSQTISKKTVRSIQEAPAVSEDLVIRLRRPPLRYPR YEATSVQQKVNFSEEGETEEDDQDSSHSSVTTVKARSRDSDESG DKTTRSSSQYIESFW
6733	613	1311	RSCRQVGMRSRNQGGESASDGHISCPKPSIIGNAGEKSLSEDAK KKKKSNRKEDDVMASGTVKRHLKTSGECERKTKKSLELSKEDLI QLLSIMEGELQAREDVIHMLKTEKTKPEVLEAHYGSAEPEKVLR VLHRDAILAQEKSIGEDVYEKPISELDRLEEKQKETYRRMLEQL LLAEKCHRRTVYELENEKHKHTDYMNKSDDFTNLLEQERERLKK LLEQEKAYQARKE
6734	189	551	SAAMFPVFSGCFQELQEKNKSLELVSFEEVAVHFIWEEWQDLDD AQRTLYRDVMLETYSSLVSLGHCITKPEMIFKLEQGAEPWIVEE

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			TLNLRLSGGSKKQVFSGICHRSLVELCEVHLV
6735	280	558	KSRRAGVTKMSNPFLKQVFNKDKTFRIKRKFEPGTQRFELHKKA QASLNAGLDLRLAVQLPPGEDLNDWVAHVVDFFNRVNLIYGTI XDGCT
6736	195	808	MNYELNFKREMPNIKSLGLTNLNFLLKKLSSVLPLITDYVYFEN SSSNPYLIRRIEELNKTASGNVEAKVVCFYRRRDISNTLIMLAD KHAKEIEEESETTVEADLTDKQKHQLKERELFLSRQYESLPATH IRGKCSVALLNETESVLSYLDKEDTFYYSLVYDPSLKTLLADKG EIRVGPRYQADIPEMLLEGTFFCVFAVL
6737	150	1209	PVIMPLHFSPGDIVRPSCCVSSSPKLRRNAHSRLESYRPDTDLS REDTGCNLQHISDRENIDDLNMEFNPSDHPRASTIFLSKSQTDV REKRKSLFINHHPPGQIARKYSSCSTIFLDDSTVSQPNLKYTIK CVALAIYYHIKNRDPDGRMLLDIFDENLHPLSKSEVPPDYDKHN PEQKQIYRFVRTLFSAAQLIAECAIVTLVYLERLLTYAEIDICP ANWKRIVLGAILLASKVWDDQAVWNVDYCQILKDITVEDMNELE RQFLELLQFNINVPSSVYAKYYFDLRSLAEANNLSFPLEPLSRE RAHKLEAISRLCEDKYKDLRRSARKRSASADNLTLPRWSPAIIS
6738	148	653	CACAEQPARAEVGAATALPVRWASGEMAPSGSLAVPLAVLVLLL WGAPWTHGRRSNVRVITDENWRELLEGDWMIEFYAPWCPACQNL QPEWESFAEWGEDLEVNIAKVDVTEQPGLSGRFIITALPTIYHC KDGEFRRYQGPRTKKDFINFISDKEWKSIEPVSSWF
6739	3	631	SWPDMAEEEVAKLEKHLMLLRQEYVKLCKKLAETEKRCALLAAQ ANKESSSESFISRLLAIVADLYEQEQYSDLKIKVGDRHISAHKF VLAARSDSWSLANLSSTKELDLSDANPFVTMTMLRWIYTDELEF REDDVFLTELMKLANRFQLQLLRERCEKGVMSLVNVRNCIRFYQ TAEELNASTLMNYCAEIIASHWVSEVEGVNKAL
6740	3	631	SWPDMAEEEVAKLEKHLMLLRQEYVKLCKKLAETEKRCALLAAQ ANKESSSESFISRLLAIVADLYEQEQYSDLKIKVGDRHISAHKF VLAARSDSWSLANLSSTKELDLSDANPFVTMTMLRWIYTDELEF REDDVFLTELMKLANRFQLQLLRERCEKGVMSLVNVRNCIRFYQ TAEELNASTLMNYCAEIIASHWVSEVEGVNKAL
6741	141	960	PLTLPFSSRARAGHTMNTSPGTVGSDPVILATAGYDHTVRFWQA HSGICTRTVQHQDSQVNALEVTPDRSMIAAAVQPVSLGYQHIRM YDLNSNNPNPIISYDGVNKNIASVGFHEDGRWMYTGGEDCTARI WDLRSRNLQCQRIFQVNAPINCVCLHPNQAELIVGDQSGAIHIW DLKTDHNEQLIPEPEVSITSAHIDPDASYMAAVNSTLVPFSCLL PLAIGILQEGEFESLARRGLLFLACQGNCYVWNLTGGIGDEVTQ LIPKTKIP
6742	141	960	PLTLPFSSRARAGHTMNTSPGTVGSDPVILATAGYDHTVRFWQA HSGICTRTVQHQDSQVNALEVTPDRSMIAAAVQPVSLGYQHIRM YDLNSNNPNPIISYDGVNKNIASVGFHEDGRWMYTGGEDCTARI WDLRSRNLQCQRIFQVNAPINCVCLHPNQAELIVGDQSGAIHIW DLKTDHNEQLIPEPEVSITSAHIDPDASYMAAVNSTLVPFSCLL PLAIGILQEGEFESLARRGLLFLACQGNCYVWNLTGGIGDEVTQ LIPKTKIP
6743	1	412	MHSTQDKSLHLEGDPNPSAAPTSTCAPRKMPKRISISKQLASVK ALRKCSDLEKAIATTALIPRNSSDSDGKLEKAIAKDLLQTQFRN FAEGQETKPKYREILSELDEHTENKLDFLDFMILLLSITVMSDL LQNIR
6744	95	1343	RTPARNRCAGCEVLSRFSSPNKASSFALCSAGGGLPAVRALRRD RQKVSTVGYGMDEVEQDQHEARLKELFDSFDTTGTGSLGQEELT DLCHMLSLEEVAPVLQQTLLQDNLLGRVHFDQFKEALILILSRT LSNEEHFQEPDCSLEAQPKYVRGGKRYGARSLPEFQESVEEFPE VTVIEPLDEEARPSHIPAGDCSEHWKTCRSEEYEAEGQLRFWNP DDLNASQSGSSPPQDWIEEKLQEVCEDLGITRDGHLNRKKLVSI

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			CEQYGLQNVDGEMLEEVFHNLDPDGTMSVEDFFYGLFKNGKSLT PSASTPYRQLKRHLSMQSFDESGRRTTTSSAMTSTIGFRVFSCL DDGMGHASVERILDTWQEEGIENSQEILKALDPGLDGNINLTEL TLALENELLVTKNSIHQACI
6745	1	588	TFRDQGWAQRRRWLLGCASWESWEAAIAAGPGLPSSTARQQNNP AAGTECFAAVWARGTAMGSVLSTDSGKSAPASATARALERRRDP ELPVTSFDCAVCLEVLHQPVRTRCGHVFCRSCIATSLKNNKWTC PYCRAYLPSEGVPATDVAKRMKSEYKNCAECDTLVCLSEMRAHI RTCQKYIDKYGPLQELEETA
6746	110	492	GATGAMAESAPARHRRKRRSTPLTSSTLPSQATEKSSYFQTTEI SLWTVVAAIQAVEKKMESQAARLQSLEGRTGTAEKKLADCEKMA VEFGNQLEGKWAVLGTLLQEYGLLQRRLENVENLLRNRN
6747	247	484	EAVTFKDVAVVFTEEELGLLDLAQRKLYRDVMLENFRNLLSVGH QPFHRDTFHFLREEKFWMMDIATQREGNSVYAGVC
6748	201	665	MTTFKEAVTFKDVAVVFTEEELGLLDPAQRKLYRDVMLENFRNL LSVGNQPFHQDTFHFLGKEKFWKMKTTSQREGNSGGKIQIEMET VPEAGPHEEWSCQQIWEQIASDLTRSQNSIRNSSQFFKEGDVPC QIEARLSISXVQQXPYRCNECKQ
6749	95	719	RREVKGGDGVCPRARGSPQSQQFPSCAGGGEGLQQSGEALDGAM SAGGPCPAAAGGGPGGASCSVGAPGGVSMFRWLEVLEKEFDKAF VDVDLLLGEIDPDQADITYEGRQKMTSLSSCFAQLCHKAQSVSQ INHKLEAQLVDLKSELTETQAEKVVLEKEVHDQLLQLHSIQLQL HAKTGQSADSGTIKAKLSGPSVEELERELKAN
6750	3	428	SCESRRPGAKWVWASGALPRDTTGLGSEQPSGDVAQSNRATMGT TAPGPIHLLELCDQKLMEFLCNMDNKDLVWLEEIQEEAERMFTR EFSKEPELMPKTPSQKNRRKKRRISYVQDENRDPIRRRLSRRKS RSSQLSSRR
6751	152	1417	PTKATEMAGASVKVAVRVRPFNSREMSRDSKCIIQMSGSTTTIV NPKQPKETPKSFSFDYSYWSHTSPEDINYASQKQVYRDIGEEML QHAFEGYNVCIFAYGQTGAGKSYTMMGKQEKDQQGIIPQLCEDL FSRINDTTNDNMSYSVEVSYMEIYCERVRDLLNPKNKGNLRVRE HPLLGPYVEDLSKLAVTSYNDIQDLMDSGNKARTVAATNMNETS SRSHAVFNIIFTQKRHDAETNITTEKVSKISLVDLAGSERADST GAKGTRLKEGANINKSLTTLGKVISALAEMDSGPNKNKKKKKTD FIPYRDSVLTWLLRENLGGNSRTAMVAALSPADINYDETLSTLR YADRAKQIRCNAVINEDPNNKLIRELKDEVTRLRDLLYAQGLGD ITDMTNALVGMSPSSSLSALSSRNV
6752	24	1834	RNCVPPLGCYRSRVKFHSDIKMQYSHHCEHLLERLNKQREAGFL CDCTIVIGEFQFKAHRNVLASFSEYFGAIYRSTSENNVFLDQSQ VKADGFQKLLEFIYTGTLNLDSWNVKEIHQAADYLKVEEVVTKC KIKMEDFAFIANPSSTEISSITGNIELNQQTCLLTLRDYNNREK SEVSTDLIQANPKQGALAKKSSQTKKKKKAFNSPKTGQNKTVQY PSDILENASVELFLDANKLPTPVVEQVAQINDNSELELTSVVEN TFPAQDIVHTVTVKRKRGKSQPNCALKEHSMSNIASVKSPYEAE NSGEELDQRYSKAKPMCNTCGKVFSEASSLRRHMRIHKGVKPYV CHLCGKAFTQCNQLKTHVRTHTGEKPYKCELCDKGFAQKCQLVF HSRMHHGEEKFYKCDVCNLQFATSSNLKIHARKHSGEKPYVCDR CGQRFAQASTLTYHVRRHTGEKPYVCDTCGKAFAVSSSLITHSR KHTGEKPFICELCGNSYTDIKNLKKHKTKVHSGADKTLDSSAED HTLSEQDSIQKSPLSETMDVKPSDMTLPLALPLGTEDHHMLLPV TDTQSPTSDTLLRSTVNGYSEPQLIFLQQLY
6753	2	1305	VPSLPYPPQKVVAHTEFTTSSDSETANGIAKPDPVMPGGEEKAS PFGIKLRRTNYSLRFNCDQQAEQKKKKRHSSTGDSADAGPPAAG SARGEKEMEGVALKHGPSLPQERKQAPSTRRDSAEPSSSRSVPV AHPGPPPASSQTPAPEHDKAANKMPLAQKPALAPKPTSQTPPAS

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			PLSKLSRPYLVELLSRRAGRPDPEPSEPSKEDQESSDRRPPSPP GPEERKGQKRDEEEEATERKPASPPLPATQQEKPSQTPEAGRKE KPMLQSRHSLDGSKLTEKVETAQPLWITLALQKQKGFREQQATR EERKQAREAKQAEKLSKENVSVSVQPGSSSVSRAGSLHKSTALP EEKRPETAVSRLERREQLKKANTLPTSVTVEISYSSPAAPLVKE VSKRFSSPDDAPVSSEPAWLALAKRKAKAWSDCPLIIK
6754	2	413	FVRRRKRRLGGPEVNTMSSLHKSRIADFQDVLKEPSIALEKLRE LSFSGIPCEGGLRCLCWKILLNYLPLERASWTSILAKQRELYAQ FLREMIIQPGIAKANMGVSREDVTFEDHPLNPNPDSRWNTYFKD NEVLL
6755	298	1343	PGLQLQVALEADWFLDMPGGRRGPSRQQLSRSALPSLQTLVGGG CGNGTGLRNRNGSAIGLPVPPITALITPGPVRHCQIPDLPVDGS LLFEFLFFIYLLVALFIQYINIYKTVWWYPYNHPASCTSLNFHL IDYHLAAFITVMLARRLVWALISEATKAGALSMIHYMVLISARL VLLTLCGWVLCWTLVNLFRSHSVLNLLFLGYPFGVYVPLCCFHQ DSRAHLLLTDYNYVVQHEAVEESASTVGGLAKSKDFLSLLLESL KEQFNNATPIPTHSCPLSPDLIRNEVECLKADFNHRIKEVLFNS LFSAYYVAFLPLCFVKVSGYLTFMCFLDLCVNYINWVFLV
6756	180	754	IERALGSLPLSIPVSWGSLRTLKYQQQPLRFKVLLCQTRVQCHD LRSLQPQPPGLKQSFCLRVLGLQTCATTPGLRDLTCKELIILTE REAQKRKKRKEKESGMALTQGPLTFRDVAIEFSQEEWKSLDPVQ KALYWDVMLENYRNLVFLGKDNFALEVKICFRVFLYFLCCLSWE PFHYLTETEALLTHK
6757	2	455	NSRVEAPEAHSRESQGSDAMRKHLSWWWLATVCMLLFSHLSAVQ TRGIKHRIKWNRKALPSTAQITEAQVAENRPCAFIKQGRKLDID FGAEGNRYYEANYWQFPDGIHYNGCSEANVTKEAFVTGCINATQ AANQGEFQKPDNKLHQQVLW
6758	1	1008	ASGPELPGRRFRDRAPWLPARLLRGVLAVWVSLSALGPGSFCRR RVPSLAQLGHSEAAPSPDDVRWSRVPDRCPEERDRAWPPPPPPS LPPSFRRNMANNSPALTGNSQPQHQAAAAAACQQQQCGGGGATK PAVSGKQGNVLPLWGNEKTMNLNPMILTNILSSPYFKVQLYELK TYHEVVDEIYFKVTHVEPWEKGSRKTAGQTGMCGGVRGVGTGGI VSTAFCLLYKLFTLKLTRKQVMGLITHTDSPYIRALGFMYIRYT QPPTDLWDWFESFLDDEEDLDVKAGGGCVMTIGEMLRSFLTKLE WFSTLFPRIPVPVQKNIDQQIKTRPRKI
6759	1	513	RKHNFHSLDGTSTRAFHPQTGLPLLSSPVPQRKTQSGCFDLDSS LLHLKSFSSRSFRPCLNIEDDPDIHEKPFLSSSAPPITSLSLLG NFEESVLNYRFDPLGIVDGFTAEVGASGAFCPTHLTLPVEVSFY SVSDDNAPSPYMGVITLESLGKRGYRVPPSGTIQVVCVL
6760	239	606	VLSKKKGLSAEEKRTRMMEIFSETKDVFQLKDLEKIAPKEKGIT AMSVKEVLQSLVDDGMVDCERIGTSNYYWAFPSKALHARKHKLE VLESQLSEGSQKHASLQKSIEKAKIGRCETEERT
6761	29	1733	ERTLRGLFEVAAPSDVADAAVSRRGRCCCCLHCTQTQVAQDCPS SSSSVQRCELSLFQSLHTMTSKKLVNSVAGCADDALAGLVACNP NLCLLQGHRVALRSDLDSLKGRVALLSGGGSGHEPAHAGFIGKG MLTGVIAGAVFTSPAVGSILAAIRAVAQAGTVGTLLIVKNYTGD RLNFGLAREQARAEGIPVEMVVIGDDSAFTVLKKAGRRGLCGTV LIHKVAGALAEAGVGLEEIAKQVNVVTKAMGTLGVSLSSCSVPG SKPTFELSADEVELGLGIHGEAGVRRIKMATADEIVKLMLDHMT NTTNASHVPVQPGSSVVMMVNNLGGLSFLELGIIADATVRSLEG RGVKIARALVGTFMSALEMPGISLTLLLVDEPLLKLIDAETTAA AWPNVAAVSITGRKRSRVAPAEPQEAPDSTAAGGSASKRMALVL ERVCSTLLGLEEHLNALDRAAGDGDCGTTHSRAARAIQEWLKEG PPPASPAQLLSKLSVLLLEKMGGSSGALYGLFLTAAAQPLKAKT SLFAWSAAMDAGLEAMQKYGKAAPGDRTMLDSLWAAGQBL

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6762	3	613	ASTISWRLCVAGAEARRPVPVAGERAGGGAMWFMYLLSWLSLFI QVAFITLAVAAGLYYLAELIEEYTVATSRIIKYMIWFSTAVLIG LYVFERFPTSMIGVGLFTNLVYFGLLQTFPFIMLTSPNFILSCG LVVVNHYLAFQFFAEEYYPFSEVLAYFTFCLWIIPFAFFVSLSA GENVLPSTMQPGDDVVSNYFTKGKRGK
6763	2	760	SGPDPPGRRFRGCCCVRPPAGAGMELGGHWDMNSAPRLVSETAE RKQEQKTGTEAEAADSGAVGARRFLLCLYLGGFLDLFGVSMVVP LLSLHVKSLGASPTVAGIVGSSYGILQLFSSTLVGCWSDVVGRR SSLLACILLSALGYLLLGAATNVFLFVLARVPAGIFKHTLSISR ALLSDVVPEKERPLVIGHFNTASGVGFILGPVVGGYLTELEDGF YLTAFICFLVFILNAGLVWFFPRREAKPGSTE
6764	80	438	LKKMDTMMLSVRNLFEQLVRRVEILSEGNEVQFIQLAKDFEDFR KKWQRTDHELGKYKDLLMKAETERSALDVKLKHARNQVDVEIKR RQRAEADCEKLERQIQLIREMLMCDTSGSIQ
6765	3	550	ARYSRVDHFCRRRCRAVARAPRFLLQFPSGPSRHFLAACVARWL RGSVLVSEALSGSAMDGIVTEVAVGVKRGSDELLSGSVLSSPNS NMSSMVVTANGNDSKKFKGEDKMDGAPSRVLHIRKLPGEVTETE VIALGLPFGKVTNILMLKGKNQAFLELATEEAAITNGNYYSAVT PHLRNQ
6766	1	1287	EGGSFKASLTWLWPLGEMKLHCEVEVISRHLPALGLRNRGKGVR AVLSLCQQTSRSQPPVRAFLLISTLKDKRGTRYELRENIEQFFT KFVDEGKATVRLKEPPVDICLSKANSSSLKGFLSAMRLAHRGCN VDTPVSTLTPVKTSEFENFKTKMVITSKKDYPLSKNFPYSLEHL QTSYCGLVRVDMRMLCLKSLRKLDLSHNHIKKLPATIGDLIHLQ ELNLNDNHLESFSVALCHSTLQKSLWSLDLSKNKIKALPVQFCQ LCELKNLKLDDNELIQFPCKIGQLINLRFLSAARNKLPFLPSEF RNLSLEYLDLFGNTFEQPKVLPVIKLQAPLTLLESSARTILHNR IPYGSHIIPPHLCQDLDTAKICVCGRFCLNSFIQGTTTMNLHSV AHTVVLVDNLGGTEAPIISYFCSLGCYVNSSDI
6767	336	919	APMICLCSSDLQFRYKEAFLRDRGLQIGYCSVDDDPRMKHFLNV GRLQSDNEYKKDFAKSRSQFHSSTDQPGLLQAKRSQQLASDVHY RQPLPQPTCDPEQLGLRHAQKAHQLQSDVKYKSDLNLTRGVGWT PPGSYKVEMARRAAELANARGLGLQGAYRGAEAVEAGDHQSGEV NPDATEILHVKKKKALLL
6768	2	363	PGSTISCYLLSEGSLPLCMQVACGEEKHRAPTMKTLRARFKKTE LRLSPTDLGSCPPCGPCPIPKPPAARGRRQSQDWGKSDERLLQAV ENNDAPRVAALIARKGLVPTKLDPEGKSAFHL
6769	284	396	MSTPDFSTAENNQELANEVSCLKAMLTLMLQAMGQAD
6770	1	397	QRNYQVIWSSTMAKLHDYYKDEVVKKLMTEFNYNSVMQVPRVEK ITLNMGVGEAIADKKLLDNAAADLAAISGQKPLITKARKSVAGF KIRQGYPIGCKVTLRGERMWEFFERLITIAVPRIRDFRGLSAKS
6771	3	378	APAGTLAMTGKSVKDVDRYQAVLANLLLEEDNKFCADCQSKGPR WASWNIGVFICIRCAGIHRNLGVHISRVKSVNLDQWTQEQIQCM QEMGNGKANRLYEAYLPETFRRPQIDPYLFWSNLEG
6772	1	1400	AAAFLQGMTVNGFINTVITSL\ERRYDLHSYQSGLIASSYDIAA CLCLTFVSYFGGSG\HKPRWLGWGR\VLMGTGSLVFALPHPTAG P*+GWKLDAGVRTCPANPR\PVCAG\HTSGLSRYQLVFMLGQFL HGVGATPLYTLGVTYLDENVKSSCSPIYIAIFYTAAILGPAAGY LIGGALLNIYTEMGRRTELTTESPLWVGAWWVGFLGSGAAAFFT AVPILGYPRQLPGSQRYAVMRAAEMHQLKDSSRGEASNPDFGKT IRDLPLSIWLLLKNPTFILLCLAGATEATLITGMSTFSPKFLES QFSLSASEAATLFGYLVVPAGGGGTFLGGFFVNKLRLRGSAVIK FCLFCTVVSLLGILVFSLHCPSVPMAGVTASYGGSLLPEGHLNL TAPCNAACSCQPEHYSPVCGSDGLMYFSLCHAGCPAATETNVDG QKVYRDCSCIPQNLSSGFCHATAGKCTST

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6773	1	630	PWEAPKEHKYKAEEHTVVLTVTGEPCHFPFQYHRQLYHKCTHKG RPGPQPWCATTPNFDQDQRWGYCLEPKKVKDHCSKHSPCQKGGT CVNMPSGPHCLCPQHLTGNHCQKEKCFEPQLLRFFHKNEIWYRT EQAAVARCQCKGPDAHCQRLASQACRTNPCLHGCRCLEVEGHRL CHCPVGYTGPFCDVGE*GSGASRRPAPRWDGLAR
6774	146	389	LTELSDQQYFLFFILSS/WVPTFLSMDVDGRVIKADSFSKIISS GLRIGFLTGPKPLIERVILHIQVSTLHPSTFNQLMISQ
6775	104	614	TCPSQLRVLTARGGRRAPSPQLWTLVLALIEEKWRSHRILRMNS GRPETMENLPALYTIFQGEVAMVTDYGAFIKIPGCRKQGLVHRT HMSSCRVDKPSEIVDVGDKVWVKLIGREMKNDRIKVSLSMKVVN QGTGKDLDPNNV\SLSKKRGGGDPSRITLGRRSPLRLS
6776	3	1108	HERHERHEGALSCQDALLRISIPLDSNMRPEKCRRFVHPQWQLLH LNGTFPNTSDADMEPCVDGWVYDRISFSSTIVTEWDLVCDSQSL TSVAKFVFMAGMMVGGILGGHLSDRFGRRFVLRWCYLQVAIVGT CAALAPTFLIYCSLRFLSGIAAMSLITNTIMLIAEWATHRFQAM GITLGMCPSGIAFMTLAGLAFAIRDWHILQLVVSVPYFVIFLTS SWLLESARWLIINNKPEEGLKELRKAAHRSGMKNARDTLTLEIL KSTMKKELEAAQKKKPFLGERLHMPNICKRISLLPFTKFANFMA YFGLNLHG/LKHLGNNVFLLQTLFGAV/TPPGQLVLHLGHWGSG RVSSRGRVNCLGLFVLQVW
6777	779	63	CFFHGPAWRDCEVRATFAKKQGQSGIISCJAFSPAQPLYACGSY GRSLGLYAWDDGSPIALLGGHQGGITHLCFHPDGNRFFSGARKD AELLCWDLRQSGYPLWSLGREVTTNQRIYFDLDPTGQFLVSGST SGAVSVWDTDGPGNDGKPEPVLSFLPQKDCTNGVSLHPSLPLLG HCLPVSVCFLSPTESGGRRRGAGPSLGSPRRHVHLECRLQLWWC GGGARLQHP**SPRARKGR
6778	311	805	IQSITDESRGSIRRKNPANTRLFLNVP\EETAGDSE/ERSPEEE VQADPRIRSASPKCPTSSPFPKGRSPEGEGET\DPEKVHFHPGP KDKSVAEKN\KGP\SPVSSEGIKDFFSMKPEWENLNQSNVRRMH T\AVRLNEVIVKKSRDAKLVLLNMPGPPRNRNGDENY
6779	2	535	RALRRQPRLLAJANGIEPESMAISEPIKGSRKPCVNKEELALKKP MAKCAWKGPREPPQDARAEAESPGGASESDQDGGHESPPKKKAV AWVSAKNPAPMRKKKKVSLGPVSYVLVDSEDGRKKPVMPKKGPG SRREASDQKAPRGQQPAEATASTSRGPKAKPEGSPRRATNESRK V
6780	3	403	HEVNDNKPEININLMSPGKEEISYIFEGDFIDTFVALVRVQDKD SGLNGEIVCKLHGHGHFKLQKTYENNYLILTNATLDREKRSEYS LTVIAEDRGTPSLSTVKHFTVQINDINDNPPHFQRSRYEFVISE K
6781	1	1269	APTRPVFPTLQDLSSSKEPSNSLNLPHSNELCSSLVHPELSEVS SNVAPSIPPVMSRPVSSSSISTFLPPNQITVFVTSNPITTSANT SAALPTHLQSALMSTVVTMPNAGSKVMVSEGQSAAQSNARPQFI TPVFINSSSIIQVMKGSQPSTIPAAPLTTNSGLMPPSVAVVGPL HIPQNIKFSSAPVPPNALSSSPAPNIQTGRPLVLSSRATPVQLP SPPCTSSPVVPSHPPVQQVKELNPDEASPQVNTSADQNTLPSSQ STTMVSPLLTNSPGSSGNRRSPVSSSKGKGKVDKIGQILLTKAC KKVTGSLEKGEEQYGADGETEGQGLDTTAPGLMGTEQLSTELDS KTPTPPAPTLLKMTSSPVGPGTASAGPSLPGGALPTSVRSIVTT LVPSELISAVPTTKSNHGGIASESLAG
6782	3	1327	RKPTVIRIPAKPGKCLHEDPQSPPPLPAEKPIGNTFSTVSGKLS NVERTRNLESNHPGQTGGFVRVPPRLPPRPVNGKTIPTQQPPTK VPPERPPPPKLSATRRSNKKLPFNRSSSDMDLQKKQSNLATGLS KAKSQVFKNQDPVLPPRPKPGHPLYSKYMLSVPHGIANEDIVSQ NPGELSCKRGDVLVMLKQTENNYLECQKGEDTGRVHLSQMKLIT PLDEHLRSRPNPFSPPKAPSHAQKPVDSGAPHAVVLHDFPAEQV

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			DDLNLTSGEIVYLLEKIDTDWYRGNCRNQIGIFPANYVKVIIDI PEGGNGKRECVSSHCVKGSRCVARFEYIGEQKDELSFSEGEIII LKEYVNEEWAHGEVRGRTGIFPLNFVEPVEDYPTSGANVLSTKV PLKTKKEDSGSNSQVNSLPAEWCEALHSFTAETSDDLSFKRGDR I
6783	3	1750	SYHHHAQQSAAASPNLTASQKTVTTTSMITTKTLPLVLKAATA TMPASVVGQRFTIAMVTAINSQKAVLSTDVQNTPVNLQTSSKVT GPGAEAVQIVARNTVTLQVQATPPQPIKVPQFIPPPRLTPRPNF LPQVRPKPVAQNNIPIAPAPPPMLAAPQLIQRPVMLTKFTPTTL PTSQNSIHPVRVVNGQTATIAKTFPMAQLTSIVIATPGTRLAGP QTVQLSKPSLEKQTVKSHTETDEKQTESRTITPPAAPKPKREEN PQKLAFMVSLGLVTHDHLEEIQSKRQERKRRTTANPVYSGAVFE PERKKSAVTYLNSTMHPGTRKRGRPPKYNAVLGFGALTPTSPQS SHPDSPENEKTETTFTFPAPVQPVSLPSPTSTDGDIHEDFCSVC RKSGQLLMCDTCSRVYHLDCLDPPLKTIPKGMWICPRCQDQMLK KEEAIPWPGTLAIVHSYIAYKAAKEEEKQKLLKWSSDLKQEREQ LEQKVKQLSNSISKCMEMKNTILARQKEMHSSLEKVKQLIRLIH GIDLSKPVDSEATVGAISNGPDCTPPANAATSTPAPSPSSQSCT ANCNQGEETK
6784	3	1750	SYHHHAQQSAAASPNLTASQKTVTTTSMITTKTLPLVLKAATA TMPASVVGQRFTIAMVTAINSQKAVLSTDVQNTPVNLQTSSKVT GPGAEAVQIVARNTVTLQVQATPPQPIKVPQFIPPPRLTPRPNF LPQVRPKPVAQNNIPIAPAPPPMLAAPQLIQRPVMLTKFTPTTL PTSQNSIHPVRVVNGQTATIAKTFPMAQLTSIVIATPGTRLAGP QTVQLSKPSLEKQTVKSHTETDEKQTESRTITPPAAPKPKREEN PQKLAFMVSLGLVTHDHLEEIQSKRQERKRRTTANPVYSGAVFE PERKKSAVTYLNSTMHPGTRKRGRPPKYNAVLGFGALTPTSPQS SHPDSPENEKTETTFTFPAPVQPVSLPSPTSTDGDIHEDFCSVC RKSGQLLMCDTCSRVYHLDCLDPPLKTIPKGMWICPRCQDQMLK KEEAIPWPGTLAIVHSYIAYKAAKEEEKQKLLKWSSDLKQEREQ LEQKVKQLSNSISKCMEMKNTILARQKEMHSSLEKVKQLIRLIH GIDLSKPVDSEATVGAISNGPDCTPPANAATSTPAPSPSSQSCT ANCNQGEETK
6785	1	528	LGNTVLHYCSMYSKPECLKLLLRSKPTVDIVNQAGETALDIAKR LKATQCEDLLSQAKSGKFNPHVHVEYEWNLRQEEIDESDDDLDD KPSPVKKERSPKPQSFCHSSSISPQDKLALPGFSTPRDKQRLSY GAFTNQIFVSTSTDSPTSPTTEAPPLPPRNAGKGPTGPPITPHR
6786	1820	1397	RSPKVLVLAPTAELANHVSRDFKDI\TRKLTVARFYGGTSYQSQ INHIRNGIDILVGTPGRIKDHLQSGRLDLSKLRHVVLDEVDQML DLGFAEQVEDIIHESYKTDSEDNPQTLLFSATCPQWVYTVA\KK YMKSRYEQVDLIGKMTQKAATTVEHLAIQCHWSQRPAVIGDVLQ VYSGSEGRAIIFCETKKNVTEMAMNPHIKQNAQCLHGDIAQSQR EITLKGFREGSFKVLVATNVAARGLDIPEVDLVIQSSPPQDVES YIHRSGRTGRAGRTGICICFYQPRERGQLRYVEQKAGITFKRVG VPSTMDLVKSKSMDAIRSLASVSYAAVDFFRPSAQRLIEEKGAV DALAAALAHISGASSFEPRSLITSDKGFVTMTLESLEEIQDVSC AWKELNRKLSSKAVSQITRMCLLKGNMGVCFDVPTTESERLQAE WHDSDWILSVPAKLPEIEEYYDGNTSSNSRQRSGWSSGRSGRSG RSGGRSGGRSGRQSRQGSRSGSRQDGRRRSGNRNRSRSGGHKRS FD*VFYHLVDFLSDFLVDSVYLTGRQIDHLTGLTGLIDHLTSHS SVWN
6787	2646	2270	PSSFPKNVPLEELEEPPK*KRSGLGSLTPKSQIQNGP*PQTFFF FELGSPSGVISAHCNLRLLGSSDSPAPASRVAGIIGTCHHAWLI LVFLVEMGFHHVGQAGLKLLTL\VIHPPWPPKVLGLQT
6788	16	936	GGTVDLR\DMLAVSVLAAVRGGR/ATVRRVRESNVLHEKSKGKT REGAEDKMTSGDVLSNRKMFYLLKTAFPSVQINTEEHVD\ELDQ

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			EVILWGS*DS*GYPKGK*LLPKEVFSR/RVLLSGLTPLDATQE\ FTEDLSK\YVTTMVCVAVNGKPMLGVIHKPFSEYTAWAMVDGGS NVKARSSYNEKTPRIVVSRSHSGMVKQVALQTFGNQTTIIPAGG AGYKVLALLDVPDKSQEKADLYIHVTYIKKWDICAGNAILKALG GHMTTLSGEEISYTGSDGIEGGLLASIRMNHQALVRKLPDLEKT GHK
6789	2	678	GNGINVLKIAPESAIKFMAYEQIKRLVW**PGDS*GF/YERLVA GSLAGAIAQSSIYPMEVLKTRMALRKTGOYSGMLDCARRILARE GVAAFYKGYVPNMLGIIPYAGIDLAVYETLKNAWLQHYAVNSAD PGVFVLLACGTMSSTCGQLASYPLALVRTRMQAQASIEGAPEVT MSSLFKHILRTEGAFGLYRGLAPNFMKVIPAVSISYVVYENLKI TLGVQSR
6790	2	4068	APPAGRRRMQAAPRAGCGAALLLWIVSSCLCRAWTAPSTSQKCD EPLVSGLPHVAFSSSSSISGSYSPGYAKINKRGGAGGWSPSDSD HYQWLQVDFGNRKQISAIATQGRYSSSDWVTQYRMLYSDTGRNW KPYHQDGNIWAFPGNINSDGVVRHELQHPIIARYVRIVPLDWNG EGRIGLRIEVYGCSYWADVINFDGHVVLPYRFRNKKMKTLKDVI ALNFKTSESEGVILHGEGQQGDYITLELKKAKLVLSLNLGSNQL GPIYGHTSVMTGSLLDDHHWHSVVIERQGRSINLTLDRSMQHFR TNGEFDYLDLDYEITFGGIPFSGKPSSSSRKNFKGCMESINYNG VNITDLARRKKLEPSNVGNLSFSCVEPYTVPVFFNATSYLEVPG RLNQDLFSVSFQFRTWNPNGLLVFSHFADNLGNVEIDLTESKVG VHINITQTKMSQIDISSGSGLNDGQWHEVRFLAKENFAILTIDG DEASAVRTNSPLQVKTGEKYFFGGFLNQMNNSSHSVLQPSFQGC MQLIQVDDQLVNLYEVAQRKPGSFANVSIDMCAIIDRCVPNHCE HGGKCSQTWDSFKCTCDETGYSGATCHNSIYEPSCEAYKHLGQT SNYYWIDPDGSCPLGPLKVYCNMTEDKVWTIVSHDLQMQTPVVG YNPEKYSVTQLVYSASMDQISAITDSAEYCEQYVSYFCKMSRLL NTPDGSPYTWWVGKANEKHYYWGGSGPGIQKCACGIERNCTDPK YYCNCDADYKQWRKDAGFLSYKDHLPVSQVVVGDTDRQGSEAKL SVGPLRCQGDRNYWNAASFPNPSSYLHFSTFQGETSADISFYFK TLTPWGVFLENMGKEDFIKLELKSATEVSFSFDVGNGPVEIVVR SPTPLNDDQWHRVTAERNVKQASLQVDRLPQQIRKAPTEGHTRL ELYSQLFVGGAGGQQGFLGCIRSLRMNGVTLDLEERAKVTSGFI SGCSGHCTSYGTNCENGGKCLERYHGYSCDCSNTAYDGTFCNKD VGAFFEEGMWLRYNFQAPATKARDSSSRVDNAPDQQNSHPDLAQ EEIRFSFSTTKAPCILLYISSFTTDFLAVLVKPTGSLQIRYNLG GTREPYNIDVDHRNMANGQPHSVNITRHEKTIFLKLDHYPSVSY HLPSSSDTLFNSPKSLFLGKVIETGKIDQEIHKYNTPGFTGCLS RVQFNQIAPLKAALRQTNASAHVHIQGELVESNCGASPLTLSPM SSATDPWHLDHLDSASADFPYNPGQGQAIRNGVNRNSAIIGGVI A\VVIFTPSLCTP\VLP*SR*HVSPHKGTLPIPNEAKGAGSRQK KPGRRPSMNNDPPTSQRPIDESKKEWPHLRGGYLAMG
6791	1801	1193	TGHEGAKGEKGDKGDLGPRGERGQHGPKGEKGYPGIPPEL/PGW SAVV*SWLTAASTKVQAILLPQPLE*LGLQIAFMASLATHFSNQ NSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDV EEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVW LRMGNGALHGDHQRFSTFAGFLLFETK
6792	33	1073	VRHTNWGVDMYLFSLGSESPKGAIGHIVSTEKTILAVERNKVLL PPLWNRTFSWGFDDFSCCLGSYGSDKVLMTFENLAAWGRCLCAV CPSPTTIVTSGTSTVVCVWELSMTKGRPRGLRLRQALYGHTQAV TCLAASVTFSLLVSGSQDCTCILWDLDHLTHVTRLPAHREGISA ITISDVSGTIVSCAGAHLSLWNVNGQPLASITTAWGPEGAITCC CLMEGPAWDTSQIIITGSQDGMVRVWKT/VGCEDVCSWTASRRG APGSASKPKRPQVGEEPGLESRAGR*HCFDREAQQNQP\PVTAL AVSRNHTKLLVGDERGRIFCWSADG*EERGSRGSGTTVPG

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6793	2340	805	GRKEANY\YGSLTCAGTVSLGLDAEGQEVFVPFSAVLPMVAFND LVFDGWDISSLNLAEAMRRAKVLDWGLQEQLWPHMEALRPRPSV YIPEFIAANQSARADNLIPGSRAQQLEQIRRDIRDFRSSAGLDK VIVLWTANTERFCEVIPGLNDTAENLLRTIELGLEVSPSTLFAV ASILEGCAFLNGSPQNTLVPGALELAWQHRVFVGGDDFKSGQTK VKSVLVDFLIGSGLKTMSIVSYNHLGNNDGENLSAPLCFRSKEV SKSNVVDDMVQSNPVLYTPGEEPDHCVVIKYVPYVGDSKRALDE YTSELMLGGTNTLVLHNTCEDSLLAAPIMLDLALLTELCQRVSF CTDMDPEPQTFHPVLSLLSFLFKAPLVPPGSPVVNALFRQRSCI ENILRACVGLPPQNHMLLEHKMERPGPSLKKVGPVAATYPMLNK KGPVPAATNGCTGDANGHLQEEPPMPTT*GPGHTVSRLFLPAAP HDPTLKAPTNKGRCHFSPPSTWGSWGL
6794	169	1349	DDVKRKPEASAH*EKPGPPSRPGVRGGRERAGGRGSHGARSCR\ EPAPPAPAPPEDHPDEEMGFTIDIKSFLKPGEKTYTQRCRLFVG NLPTDITEEDFKRLFERYGEPSEVFINRDRGFGFIRLESRTLAE IAKAELDGTILKSRPLRIRFATHGAALTVKNLSPVVSNELLEQA FSQFGPVEKAVVVVDDRGRATGKGFVEFAAKPPARKALERCGDG AFLLTTTPRPVIVEPMEQFDDEDGLPEKLMQKTQQYHKEREQPP RFAQPGTFEFEYASRWKALDEMEKQQREQVDRNIREAKEKLEAE MEAARHEHQLMLMRQDLMRRQEELRRLEELRNQELQKRKQIQLR HEEEHRRREEEMIRHREQEELRRQQEGFKPNYMENYVCHFLR
6795	1740	1010	GPRRQTQVRDHELDSF*DWAAQETDCAQNSGERL*KGV/LENFS TMSKSAVKISLDLLSNPLCEQDQDLLNMVTALDTAMKRMDAFNC EKVNQIQKTVIEPLKKFGSVFPSLNMAVKRREQALQDYRRLQAK VEKYEEKEKTGPVLAKLHQAREELRPVREDFEAKNRQLLEEMPR FYGSRLDYFQPSFESLIRAQVVYYSEMHKIFGDLSHQLDQPGHS DEQRERENEAKLSELRALSIVADD
6796	48	683	GKEIQIPTIKLAWLLFGLE*PVGALGKGVVSF**SHVALGQLGW LTRAVRSSWRWELCVSAQEVVSQRSA*SSPSPVGACPSLNPPET SVQEGRDCWQR*LPRLFSALVGQPGCWPQGAPPERCV*FGRCKW HLQSQVLR*ERRRCCRCLPRFA*GWRRRHQRLGLGIHPAPLGST SPPHPEGNSQQCRR*GWAAELRLPSSVVL*GKLGC*
6797	1620	211	TERMTPSQPTRGSSCTRPSSMLWTSTWRCLTCHWAGMKMSVVGV TLGPMAQGLLSASGTTTEATWTRPTTHLTLIRWWLLTASRVDPF ERPPPPPSDDLTLLESSSSYKNL/DAQIPQ/DWSMSPSTSG*RP LTSRASSIMRSRTAIPSAS*SRLTTKHTVGGSPSAWRPRPTSRS VSTPVSSSTETTASGSCLTWWSSSPAPCPSSSAPAHSFEASCCK TSLWGSCGGSGDGSSACGSGWNLSMAGTSCSSPAMCSPSRAPS* RSASRPRTWRATTSAASSWAPRRCWCGWA*SAT*PSSTTTISSS PHCGWPCPASCASAAAWLSSTWATASVAGSCWGPIM*SSAHSPW CLSACSRSSMGTTCL*RSPP\SGASRAAAAWCGSSPSSTFTPSS ASSSTWCSASSSRSSPAPTTPSSIPAAQAQRRASCRPTSHSART APPPASSAAGAARPAAFSAAAEGTPRRSIRCW
6798	3894	1696	STISWESLESWLNKATNPSNRQEDWEYIIGFCDQINKELEG*VS ALWGQLRGSGLGRGTTMAKEGQPGSPRLSALECVLLVPQ\PQIA VRLLAHKIQSPQEWEALQALTYLGDRVSEKVKTKVIELLYSWTM ALPEEAKIKDAYHMLKRQGIVQSDPPIPVDRTLIPSPPPRPKNP VFDDEEKSKLLAKLLKSKNPDDLQEANKLIKSMVREDEARIQKV TKRLHTLEEVNNNVRLLSEMLLHYSQEDSSDGDRELMKELFDQC ENKRRTLFKLASETEDNDNSLGDILQASDNLSRVINSYKTIIEG QVINGEVATLTLPDSEGNSQCSNQGTLIDLAELDTTNSLSSVLA PAPTFPSSGIPILPPPPQASGPPRSRSSSQAEATLGPSSTSNAL SWLDEELLCLGLADPAPNVPPKESAGNSQWHLLQREQSDLDFFS PRPGTAACGASDAPLLQPSAPSSSSSQAPLPPPFPAPVVPASVP APSAGSSLFSTGVAPALAPKVEPAVPGHHGLALGNSALHHLDAL DQLLEEAKVTSGLVKPTTSPLIPTTTPARPLLPFSTGPGSPLFQ

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			PLSFQSQGSPPKGPELSLASIHVPLESIKPSSALPVTAYDKNGF RILFHFAKECPPGRPDVLVVVVSMLNTAPLPVKSIVLQAAVPKS MKVKLQPPSGTELSPFSPIQPPAAITQVMLLANPLKEKVRLRYK LTFALGEQLSTEVGEVDQFPPVEQWGNL
6799	3894	1696	STISWESLESWLNKATNPSNRQEDWEYIIGFCDQINKELEG*VS ALWGQLRGSGLGRGTTMAKEGQPGSPRLSALECVLLVPQ\PQIA VRLLAHKIQSPQEWEALQALTYLGDRVSEKVKTKVIELLYSWTM ALPEEAKIKDAYHMLKRQGIVQSDPPIPVDRTLIPSPPPRPKNP VFDDEEKSKLLAKLLKSKNPDDLQEANKLIKSMVREDEARIQKV TKRLHTLEEVNNNVRLLSEMLLHYSQEDSSDGDRELMKELFDQC ENKRRTLFKLASETEDNDNSLGDILQASDNLSRVINSYKTIIEG QVINGEVATLTLPDSEGNSQCSNQGTLIDLAELDTTNSLSSVLA PAPTPPSSGIPILPPPPQASGPPRSRSSSQAEATLGPSSTSNAL SWLDEELLCLGLADPAPNVPPKESAGNSQWHLLQREQSDLDFFS PRPGTAACGASDAPLLQPSAPSSSSSQAPLPPPFPAPVVPASVP APSAGSSLFSTGVAPALAPKVEPAVPGHHGLALGNSAIHHLDAL DQLLEEAKVTSGLVKPTTSPLIPTTTPARPLLPFSTGPGSPLFQ PLSFQSQGSPPKGPELSLASIHVPLESIKPSSALPVTAYDKNGF RILFHFAKECPPGRPDVLVVVVSMLNTAPLPVKSIVLQAAVPKS MKVKLQPPSGTELSPFSPIQPPAAITQVMLLANPLKEKVRLRYK LTFALGEQLSTEVGEVDQFPPVEQWGNL
6800	404	1646	RRSPSTGLSPVPQPSSPSLSDYSIPWSLLLSGTIAWATPGK*AG *PQAW*LGLAPAIAFI/GLTRGRKQNKEKMAEGGSGDVDDAGDC SGARYNDWSDDDDDSNESKSIVWYPPWARIGTEAGTRARARARA RATRARRAVQKRASPNSDDTVLSPQELQKVLCLVEMSEKPYILE AALIALGNNAAYAFNRDIIRDLGGLPIVAKILNTRDPIVKEKAL IVLNNLSVNAENQRRLKVYMNQVCDDTITSRLNSSVQLAGLRLL TNMTVTNEYQHMLANSISDFFRLFSAGNEETKLQVLKLLLNLAE NPAMTRELLRAQVPSSLG\SLFNKKENKEVILKLLVIFENINDN FKWEENEPTQNQFGEGSLFFFLKEFQVCADKVLGIESHHDFLVK VKVGKFMAKLAEHMFPKSQE
6801	2	1755	SAEEFESQQASVTMHDVDAESFEVLVDYCYTGRVSLSEANVERL YAASDMLQLEYVREACASFLARRLDLTNCTAILKFADAFGHRKL RSQAQSYIAQNFKQLSHMGSIREETLADLTLAQLLAVLRLDSLD VESEQTVCHVAVQWLEAAPKERGPSAAEVFKCVRWMHFTEEDQD YLEGLLTKPIVKKYCLDVIEGALQMRYGDLLYKSLVPVPNSSSS /R*QQQLSCICSRKSTPETGYVCQGDGDLLWTPQRSLS\RYDPY SGDIYTMPSPLTSFAHTKTVTSSAVCVSPDHDIYLAAQPRKDLW VYKPAQNSWQQLADRLLCREGMDVAYLNGYIYILGGRDPITGVK LKEVECYSVQRNQWALVAPVPHSFYSFELIVVQNYLYAVNSKRM LCYDPSHNMWLNCASLKRSDFQEACVFNDEIYCICDIPVMKVYN PARGEWRRISNIPLDSETHNYQIVNHDQKLLLITSTTPQWKKNR VTVYEYDTREDQWINIGTMLGLLQFDSGFICLCARVYPSCLEPG QSFITEEDDARSESSTEWDLDGFSELDSESGSSSSFSDDEVWVQ VAPQRNAQDQQGSL
6802	157	1341	ETFPLFFFLLSKTPGKTASMAHFVQGTSRMIAAESSTEHKECAE PSTRKNLMNSLEQKIRCLEKQRKELLEVNQQWDQQFRSMKELYE RKVAELKTKLDAAERFLSTREKDPHQRQRKDDRQREDDRQRDLT RDRLQREEKEKERLNEELHELKEENKLLKGKNTLANKEKEHYEC EIKRLNKALQDALNIKCSFSEDCLRKSRVEFCHEEMRTEMEVLK QQVQIYEEDFKKERSDRERLNQEKEELCQINETSQSQLNRLNSQ IKACQMEKEKLEKQLKQMYCPPCNCGLVFHLQDPWVPTGPGAVQ KQREHPPDYQWYALDQLPPDVQHKAN/DWCLAPPPVCCQAG/PR TPGLK*SSCLWLPKC*NFRFILSKESPSVEVHTNRERQQATRER G
6803	1	2203	KLSGRPYRHMGVLGTSKLYDIRKTIFTFTPQFIDQQQFYLALDN

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			KMIVEMLRTDLSYLCSRWRMTGQPTITFPISHSMLDEDGTSLNS SILAALRKMQDGYFGGARVQTGKLSEFLTTSCCTHLSFMDPGPE GKLYSEDYDDNYDYLESGNWMNDYDSTSHARCGDEVARYLDHLL AHTAPHPKLAPTSQKGGLDRFQAAVQTTCDLMSLVTKAKELHVQ NVHMYLPTKLFQASRPSFNLLDSPHPRQENQVFSVRVEIHLPRD QSGEVDFKALVLQLKETSSLQEQADILYMLYTMKGPDWNTELYN ERSATVRELLTELYGKVGEIRHWGLIRYISGILRKKVEALDEAC TDLLSHQKHLTVGLPPEPREKTISAPLPYEALTQLIDEASEGDM SISILTQEIMVYLAMYMRTQPGLFAEMFRLRIGLIIQVMATELA HSLRCSAEEATEGLMNLSPSAMKNLLHHILSGKEFGVERK/SVR PTDSNVSPAISIHEIGAVGATKTERTGIMQLKSEIKQVEFRRLS ISAESQSPGTSMTPSSGSFPSAYDQQSSKDSRQGQWQRRRLDG ALNRVPVGFYQKVWKVLQKCHGLSVEGFVLPSSTTREMTPGEIK FSVHVES\VLNVLLRPEYRQLLVEAILVLTMLADIEIHSIGSII AVEKIVHIANDLFLQEQKTLGP\DDTMLAKDPASG\ICTLR\YD SAPSGRFGTMTYLS\RAA\ATYVQEFLP\HSICAMQ
6804	1	951	GSPGKKEEKAKNKESLCMENSSNSSSDEDEEETKAKMTPTKKYN GLEEKRKSLRTTGFYSGFSEVAEKRIKLLNNSDERLQNSRAKDR KDVWSSIQGQWPKKTLKELFSDSDTEAAASPPHPAPEEGVAEES LQTVAEEESCSPSVELEKPPPVNVDSKPIEEKTVEVNDRKAEFP SSGSNFSA*IPLPYLHLNRLHQSL*QKGSRQQSSVTVSEPLAPN QEEVRSIKSETDSTIEVDSVAGELQDLQSERE*LASRF*CQCEL KQ**SARTRTS*KSLYRSEKSERCSGRRKFIKKAEKKP*SNSGK QQKEGKRHK
6805	1539	206	RQPDLKYFGKSFDVSVSESSSLLSNDLPKFADGIKARNRNQNYL VPSPVLRILDHTAFSTEKSADIVICDEECDSPESVNQQTQEESP IEVHTAEDVPIAVEVHAISEDYDIETENNSSESLQDQTDEEPPA KLCKILDKSQALNVTAQQKWPLLRANSSGLYKCELCEFNSKYFS DLKQHMILKHKRTDSNVCRVCKESFSTNMLLIEHAKLHEEDFYI CKYCDYKTVIFENLSQHIADTHFSDHLYWCEQCDVQFSSSSELY LHFQEHSCDEQYLCQFCEHETNDPEDLHSHVVNEHACKLIELSD KYNNGEHGQYSLLSKITFDKCKNFFVCQVCGFRSRLHTNVNRHV AIEHTKIFPHVCDDCGKGFSSMLE\IAKHLNSHLSEGIYLCQYW EYSTGQIEDLKIHLDFKHSADLPHKCSDCLMRFGNERELISHLP VHETT
6806	272	3794	VALCFPNSDPVMFMDAFYGCLLAELGPVPIEVPLTRKDAGSQQV GFLLGSCGVFLALTTDACQKGLPKAQTGEVAAFKGWPPLSWLVI DGKHLAKPPKDWHPLAQDTGTGTAYIEYKTSKEGSTVGVTVSHA SLLAQCRALTQACGYSEAETLTNVLDFKRDAGLWHGVLTSVMNR MHVVSVPYALMKANPLSWIQKVCFYKARAALVKSRDMHWSLLAQ RGQRDVSLSSLRMLIVADGANPWSISSCDAFLNVFQSRGLRPEV ICPCASSPEALTVAIRRPPDLGGPPPRKAVLSMNGLSYGVIRVD TEEKLSVLTVQDVGQVMPGANVCVVKLEGTPYLCKTDEVGEICV SSSATGTAYYGLLGITKNVFEAVPVTTGGAPIFDRPFTRTGLLG FIGPDHLVFIVGKLDGLMVTGVRRHNADDVVATALAVEPMKFVY RGRIAVFSVTVLHDDRIVLVAEQRPDASEEDSFQWMSRVLQAID SIHQVGVYCLALVPANTLPKAPLGGIHISETKQRFLEGTLHPCN VLMCPHTCVTNLPKPRQKQPEVGPASMIVGNLVAGKRIAQASGR ELAHLEDSDQARKFLFLADVLQWRAHTTPDHPLFLLLNAKGTVT STATCVQLHKRAERVAAALMEKGRLSVGDHVALVYPPGVDLIAA FYGCLYCGCVPVTVRPPHPQNLGTTLPTVKMIVEVSKSACVLTT QAVTRLLRSKEAAAAVDIRTWPTILDTDDIPKKKIASVFRPPSP DVLAYLDFSVSTTGILAGVKMSHAATSALCRSIKLQCELYPSRQ IAICLDPYCGLGFALWCLCSVYSGHQSVLVPPLELESNVSLWLS AVSQYKARVTFCCYSVMEMCTKGLGAQTGVLRMKGVNLSCVRTC MVVAEERP\RIALTQSFSKLFKDLGLPARAVSTTFGCRVNVAIC

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			LQGTAGPDPTTVYVDMRALRHDRVRLVERGSPHSLPLMESGKIL PGVKVIIAHTETKGPLGDSHLGEIWVSSPHNATGYYTVYGEEAL HADHFSARLSFGDTQTIWARTGYLGFLRRTELTDASGGRHDALY VVGSLDETLELRGMRYHPIDIETSVIRAHRSIAECAVFTWTNLL VVVVVELDGLEQDALDLVALVTNVVLEEHYLVVGVVVIVDPGVIP INSRGEKQRMHLRDGFLADQLDPIYVAYNM
6807	1444	606	VGHDTVHAMFTCFPKCLGFSPPVNVTVSPRSEESHTTTVSGGNG SVFQAGPQLQALANLEARRGSIGAALSSRDVSGLPVYAQSGEPR RLTQAQVAAFPGENALEHSSDQDTWDSLRSPGFCSPLSSGGGAE SLPPGGPGHAEAGHLGKVCDFHLNHQQPSPTSVLPTEVAAPPLE KILSVDSVAVDCAYRTVPKPGPQPGPHGSLLTEGCLRSLSGDLN RFPCGMEVHSGQRELESVVAVGEAMA\LKFPMGAMSYCLRDRSR FLFRLPMGLSCPLQVQ
6808	2063	737	GVGSGAASALARSRPLASRLSSRRRTRAPRSGAMQRLAMDLRML SRELSLYLEHQVRVGFFGSGVGLSLILGPSVAYAPYYLSSIAKK PQLVTGGESFSRFLQDHCPVVTETYYPTVWCWEGRGQTLLRPF\ ITSKPPVQYRNELIKTADGGQISLDWFDNDNSTCYMDASTRPTI LLLPGLTGTSKESYILHMIHLSEELGYRCVVFNNRGVAGENLLT PRTYCCANTEDLETVIHHVHSLYPSAPFLAAGVSMGGMLLLNYL GKIGSKTPLMAAATFSVGWNTFACSESLEKPLNWLLFNYYLTTC LQSSVNKHRHMFVKQVDMDHVMKAKSIREFDKRFTSVMFGYQTI DDYYTDASPSPRLKSVGIPVLCLNSVDDVFSPSHAIPIETAKQN PNVALVLTSYGGHIGFLEGIWPRQSTYMDRVFKQFVQAMVEHGH ELS
6809	939	65	DYSGQTPVPTEHGMTLYTPAQTHPEQPGSEASTQPIAGTQTVPQ TDEAAQTDSQPLHPSDPTEKQQPKRLHVSNIPFRFRDPDLRQMF GQFGKILDVEIIFNERGSKGFGFVTFETSSDADRAREKLNGTIV EGRKIEVNNATARVMTNKKTGNPYTNGWKLNPVVGAVYGPEFYA VTGFPYPTTGTAVAYRGAHLRGRGRAVYNTFRAAPPPPPIPTYG AVVYQDGFYGAEI\LEATQPTDTLSPLQRRQPTATVTAESTQLP TRTITPSGPRRPTALEPCETFHRFLLGP
6810	939	65	DYSGQTPVPTEHGMTLYTPAQTHPEQPGSEASTQPIAGTQTVPQ TDEAAQTDSQPLHPSDPTEKQQFKRLHVSNIPFRFRDPDLRQMF GQFGKILDVEIIFNERGSKGFGFVTFETSSDADRAREKLNGTIV EGRKIEVNNATARVMTNKKTGNPYTNGWKLNPVVGAVYGPEFYA VTGFPYPTTGTAVAYRGAHLRGRGRAVYNTFRAAPPPPPIPTYG AVVYQDGFYGAEI\LEATQPTDTLSPLQRRQPTATVTAESTQLP TRTITPSGPRRPTALEPCETFHRFLLGP
6811	1522	658	DLVTVWSFVDCRVIASTHGH\KSWVSVVAFDPYTTSVEEGDPME FSGSDEDFQDLLHFGRDRADSTQCRLSRRNSTDSRPVSVTYRFG SVGQDTQLCLWDLTEDILFPHQPLSRARTHTNVMNATSPPAGSN GNSVTTPGNSVPPPLPRSNSLPHSAVSNAGSKSSVMDGAIASGV SKFATLSLHDRKERHHEKDHKRNHSMGHISSKSSDKLNLVTKTK TDPAKTLGTPLCPRMEDVPLLEPLICKKIAHERLTVLIFLEDCI VTACQEGFICTWGRPGKVVSFNP
6812	4001	1682	EDAVFSLDLSTIIQGTWPLNGEELKSNEPEGQVEPGALRYRIEQ KGLQHRLILHAVKHQDSGALVGFSCPGVQDSAALTIQESPVHIL SPQDKVSLTFTTSERVVLTCELSRVDFPATWYKDGQKVEESELL VVKMDGRKHRLILPEAKVQDSGEFECRTEGVSAFFGVTVQDPPV HIVDPREHVFVHAITSECVMLACEV\DR\EDAPVRWYKDGQEVE ESDFVVLENEGPHRRLVLPATQPSDGGEFQCVAGDECAYFTVTI TDVSSWIVYPSGKVYVAAVRLERVVLTCELCRPWAEVRWTKDGE EVVESPALLLQKEDTVRRLVLPAVQLEDSGEYLCEIDDESASFT VTVTEPPVRIIYPRDEVTLIAVTLECVVLMCELSREDAPVRWYK DGLEVEESEALVLERDGPRCRLVLPAAQPEDGGEFVCDAGDDSA FFTVTVTEPPVQFLALETTPSPLCVAPGEPVVLSCELSRAGAPV

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			VWSHNGRPVQEGEGLELHAEGPRRVLCIQAAGPAHAGLYTCQSG AAPGAPSLSFTVQVAEPPVRVVAPEAAQTRVRSTPGGDLELVVH LSGPGGPVRWYKDGERLASQGRVQLEQAGARQVLRVQGARSGDA GEYLCDAPQDSRIFLVSVEEPLLVKLVSDLTPLTVHEGDDATFR CEVSPPDADVTWLRNGAVVTPGPQRQSCCSYGGCRMCGQRKART CVSKWRQAEWVQRGPCAGCEVGSPCPTTLACPWPRMGTSTASSS MVSYWPTRAPTAARATTIAPWPGSA
6813	9	836	SSTQQRPGVPAGPRPLDGYLGVADHKPLKMHCRDCALVTSSGHL LHSRQGSQIDQTECVIRMNDAPTRGYGRDVGNRTSLRVIAHSSI QRILRNRHDLLNVSQGTVFIFWGPSSYMRRDGKGQVYNNLHLLS QVLPRLKAFMITRHKMLQFDELFKQETGQ\NRKISNTWLSTGWF TMTIALELCDRINVYGMGPPDFCRDPNHPSVPYHYYEPFGPDEC TMYLSHERGRKGSHHRFITEKRVFKNWARTFNIHFFQPDWKPES LAINHPENKPVF
6814	3	737	KFRRQEAN/ARERNRMHGLNDALDNLRKVVPCYSKTQKLSKIET LRLAKNYIWALSEILRIGKRPDLLTFVQNLCKGLSQPTTNLVAG CLQLNARSFLMGQGGEAAHHTRSPYSTFYPPYHSPELTTPPGHG TLDNSKSMKPYNYCSAYESFYESTSPECASPQFEGPLSPPPINY NGIFSLKQEETLDYGKNYNYGMHYCAVPPRGPLGQGAMFRLPTD SHFPYDLHLRSQSLTMQDELNAVFHN
6815	906	553	QGLDPASQTKVVELLKDGSGRRGDRRSSRDMAGGAGPRSESDLE DVGPTAEWNGDGSGSLRRSGSFGKLRDALRRSSEMLVKKLQGGT PQEPPNPRMKRASSLNFLNKSVEEPTQPGG
6816	1	803	NLLKTHKF\LLGQDEDSLHSVPVAQMGNYQEYLKTLASPLREID PDQPKRLHTFGNPFKQDKKGMMIDEADEFVAGPQNKVKRPGEPN SPMSSKRRRSMSLLLRKPQTPPTVTNHVGGKGPPSASWFPSYPN LIKPTLVHTDATIIHDGHEEKMENGQITPDGFLSKSAPSELINM TGDLMPPNQVDSLSDDFTSLSKDGLIQKPGSNAFVGGAKNCSLS VDDQKDPVASTLGAMPNTLQITPAMAQGINADIKHQLMKEVRKF GRSK
6817	172	3457	LGMMDSPKIGNGLPVIGPGTDIGISSLHMVGYLGKNFDSAKVPS DEYCPACKEKGKLKALKTYRISFQESIFLCEDLQCIYPLGSKSL NNLISPDLEECHTPHKPQKRKSLESSYKDSLLLANSKKTRNYIA IDGGKVLNSKHNGEVYDETSSNLFDSSGQQNPIRTADSLERNEI LEADTVDMATTKDPATVDVSGTGRPSPQNEGCTSKLEMPLESKC TSFPQALCVQWKNAYALCWLDCILSALVHSEELKNTVTGLCSKE ESIFWRLLTKYNQANTLLYTSQLSGVKDGDCKKLTSEIFAEIET CLNEVRDEIFISLQPQLRCTLGDMESPVFAFPLLLKLETHIEKL FLYSFSWDFECSQCGHQYQNRHMKSLVTPTNVIPEWHPLNAAHF GPCNNCNSKSQIRKMVLEKVSPIFMLHFVEGLPQNDLQHYAFHF EGCLYQITSVIQYRANNHFITWILDADGSWLECDDLKGPCSERH KKFEVPASEIEIVIWERKISQVTDKEAACLPLKKTNDQHALSNE KPVSLTSCSVGDAASAETASVTHPKDISVAPRTLSQDTAVTHGD HLLSGPKGLVDNILPLTLEETIQKTASVSQLNSEAFL\LENKPV AENTGILKTNTLLSQESLMASSVSAPCNEKLIQDQFVDISFPSQ VVNTNMQSVQLNTEDTVNTKSVNNTDATGLIQGVKSVEIEKDAQ LKQFLTPKTEQLKPERVTSQVSNLKKKETTADSQTTTSKSLQNQ SLKENQKKPFVGSWVKGLISRGASFMPLCVSAHRRNTITDLQPS VKGVNNFGGFKTKGINQKASHVSKKARKSASKPPPISKPPAGPP SSNGTAAHPHAHAASEVLEKSGSTSCGAQLNHSSYGNGISSANH EDLVEGQIHKLRLKLRKKLKAEKKKLAALMSSPQSRTVRSENLE QVPQDGSPNDCESIEDLLNELPYPIDIANESACTTVPGVSLYSS QTHEEILAELLSPTPVSTELSENGEGDFRYLGMGDSHIPPPVPS EFNDVSQNTHLRQDHNYCSPTKKNPCEVQPDSLTNNACVRTLNL ESPMKTDIFDEFFSSSALNALANDTLDLPHFDEYLFENY
6818	2	240	RGFDKVLWT/LSGAVK\CVQFSRISPDGEEGYPGELKVWVTYTL

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			DGGE/LHS/ATTEHKP/VQATPVNLT\TILTSTWQARLPQI
6819	1	961	GIPCTEMGNFDNANVTGEIEFAIHYCFKTHSLEICIKACKNLAY GEEKKKKCNPYVKTYLLPDRSSQGKRKTGVQRNTVDPTFQETLK YQVAPAQLVTRQLQVSVWHLGTLARRVFLGEVIIPLATWDFEDS TTQSFRWHPLRAKADKYEDSVPQSNGELTVRAKLVLPSRPRKLQ EAQEGTDQPSLHGQLCLVVLGAKNLPVRPDGTLNSFVKGCLTLP DQQKLRLKSPVLRKQACPQWKHSFVFSGVTPAQLRQSSLELTVW DQALFGMNDRLLGGT\RLGSKGDTAVGGDACSQSKLQWQKVLSS PNLWTDMTLVLH
6820	1014	340	GDMVYIVGHVPPGFFEKTQNKAWFREGFNEKYLKVVRKHHRVIA GQFFGHHHTDSFRMLYDDAGVPISAMFITPGVTPWKTTLPGVVN GANNPAIRVFEYDRATLSLKDMVTYFMNLSQANAQGTPRWELEY QLTEAYGVPDASAHSMHTVLDRIAGDQSTLQRYYVYNSVSYSAG VCDEACSMQHVCAMRQVDIDAYTTCLYASGTTPVPQLPLLLMAL LGLCT
6821	1088	518	EFDIYR/EVGGEFVPVTRDDSSNGFPRTQHGPSPTVHPIQSPQN RFCVLTLDPETLPAIATTLIDVLFYSHSTPKEAASSSPEPSSIT FFAFSLIEGYI\SIVMDAETQKKFPSDLLLTSSSGELWRMVRIG GQPLGFDECGIVAQIAGPLAAADISAYYISTFNFDHALVPEDGI GSVIEVLQRRQEGLAS
6822	1088	518	EFDIYR/EVGGEFVPVTRDDSSNGFPRTQHGPSPTVHPIQSPQN RFCVLTLDPETLPAIATTLIDVLFYSHSTPKEAASSSPEPSSIT FFAFSLIEGYI\SIVMDAETQKKFPSDLLLTSSSGELWRMVRIG GQPLGFDECGIVAQIAGPLAAADISAYYISTFNFDHALVPEDGI GSVIEVLQRRQEGLAS
6823	654	221	PPKLLSRWARMGHGDEIV\LSDLNFPGLLHLPVVGPWRSVQTAC GIPQLLEAVLKLLPLDTYVESPAAVMELVPSDKERGLQTPVWTE YESILRRAGCVRALAKIERFEFYERAKKAFAVVATGETALYGNL ILRKGVLALNPLL
6824	858	104	LLLAQRWGWG\CCFFSLAVSVKMNVLLFAPGLLFLLLTQFGFRG ALPKLGICAGLQVVLGLPFLLENPSGYLSRSFDLGRQFLFHWTV NWRFLPEALFLHRAFHLALLTAHLTLLLLFALCRWHRTGESILS LLRDPSKRKVPPQPLTPNQIVSTLFTSNFIGICFSRSLHYQFYV WYFHTLPYLLWAMPARWLTHLLRLLVLGLIELSWNTYPSTSCSS AALHICHAVILLQLWLGPQPFPKSTQHSKKAH
6825	3	1173	SSGEFGLQASDIMWTISDTGWILIILCSLMEPWALGACTFVHLL PKFDPLVILKTLSSYPIKSMMGAPIVYRMLLQQDLSSYKFPHLQ NCLAGGESLLPETLENWRAQTGLDIREFYGQTETGLTCMVSKTM KIKPGYMGTAASCYDVQIIDDKGNVLPPGTEGDIGIRVKPIRPI GIFSGYVDNFDKTAANIRGDFWLLGDRGIKDEDGYFQFMGRADD IINSSGYRIGPSEVENALMEHPAVVETAVISSPDPVRGEVVKAF VILALQFLSHDPEQLTKELQQHVKSVTAPYKYPRKIEFVLNLPK TVTGKIQRA\KLRDKEWKMSGKAPCAVRHLRDIHLDSPLLSLSF PFGPLALPMDGYGDSLWEEHEYKFCLALVISTKLYHVRC
6826	2304	954	LKTESFKPW/VNIALAFHLLGERASPNSFWQPYIQTLPREYDTP LYFEEDEVRYLQSTQAIHDVFSQYKNTARQYAYFYKVIQTHPHA NKLPLKDSFTYEDYRWAVSSVMTRQNQIPTEDGSRVTLALIPLW DMCNHTNGLITTGYNLEDDRCECVALQDFRAGEQIYIFYGTRSN AEFVIHSGFFFDNNSHDRVKIKLGVSKSDRLYAMKAEVLARAGI PTSSVFALHFTEPPISAQLLAFLRVFCMTEEELKEHLLGDSAID RIFTLGNSEFPVSWDNEVKLWTFLEDRASLLLKTYKTTIEEDKS VLKNHDLSVRAKMAIKLRLGEKEILEKAVKSAAVNREYYRQQME EKAPLPKYEESNLGLLESSVGDSRLPLVLRNLEEEAGVQDALNI REAISKAKATENGLVNGENSIPNGTRSENESLNQESKRAVEDAK GSSSDSTAGVKE

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6827	1	779	SSVVEFGLSVLGGLFLLFVLENMLGLLRHRGLRPRCCRRKRRNL ETRNLDPENGSGMALQPLQAAPEPGAQGQREKNSQHPPALAPPG HQGHSHGHQGGTDITWMVLLGDGLHNLTDGLAIGAAFSDGFSSG LSTTLAVFCHELPHELGDFAMLLQSGLSFRRLLLLSLVSGALGL GGAVLGVGLSLGPVPLTPWVFGVTAGVFLYVALVLMLPALFPSS GAPAYA\HVLLQGLGLLLGGCLMLAITLLEERLLPVTTEG
6828	3	1654	KSQHG/WILQLMHSCKEGYVKDLKGNPGLHRAMLDLDNGTRFSE LGHLSCTASLKRGSSFQSGRDDTWRYKTPHRVAFVEKLTKLVLS QLPNFWKLWISYVNGSLFSETAEKSGQIERSKNVRQRQRNDFKKM IQEVMHSLVKLTRGALLPLSIRDGEAKQYGGWEVKCELSGQWLA HAIQTVRLTHESLTALEIPNDLLQTIQDLILDLRVRCVMATLQH TAEEIKRLAEKEDWIVDNEGLTSLPCQFEQCIVCSLQSLKGVLE CKPGEASVFQQPKTQEEVCQLSINIMQVFIYCLEQLSTKPDADI DTTHLSVDVSSPDLFGSIHEDFSLTSEQRLLIVLSNCCYLERHT FLNIAEHFEKHNFQGIEKITQVSMASLKELDQRLFENYIELKAD PIVGSLEPGIYAGYFDWKDCLPPTGVRNYLKEALVNIIAVHAEV FTISKELVPRVLSKVIEAVSEELSRLMQCVSSFSKNGALQARLE ICALRDTVAVYLTPESKSSFKQALEALPQLSSGADKKLLEELLN KFKSSMHLQLTCFQAASSTMMKT
6829	1	782	MRMEAGEAAPPAGAGGRAAGGWGKWVRLNVGGTVFLTTRQTLCR EQKSFLSRLCQGEELQSDRDETGAYLIDRDPTYFGPILNFLRHG KLVLDKDMAEEGVLEEAEFYNIGPLIRIIKDRMEEKDYTVTQVP PKHVYRVLQCCQEEELTQMVSTMSDGWRFEQLVNIGSSYNYGSED QAEFLCVVSKELHSTPNGLSSESSRKTKSTEEQLEEQQQQEEEV EEVEVEQVQVEADAQEK/CCYKPEAPGCEAPDHLQGLGVPI
6830	1	935	MEPGSVENLSIVYRSRDFLVVNKHWDVRIDSKAWRETLTLQKQL RYRFPELADPDTCYGFRFCHQLDFSTSGALCVALNKAAAGSAYR CFKERRVTKAYLALLRGHIQESRVTISHAIGRNSTEGRAHTMCI EGSQGCENPKPSLTDLVVLEHGLYAGDPVSKVLLKPLTGRTHQL RV\HCSALGHPVVGDLTYGEVSGREDRPFRMMLHAFYLRIPTDT ECVEVCTPDPFLPSLDACWSPHTLLQSLDQLVQALRATPDPDPE DRGPRPGSPSALLPGPGRPPPPPTKPPETEAQRGPCLQWLSEWT LEPDS
6831	3	1087	SLFFGSSTPDNKVAEQEDLETQPSPSVEKAVTVIDPEGTIPTNF NVAEKPADHSLSEVKLKTADEPRGTLVKSGDGQNVKEKSMILSN VEDLQQPKFISEVSREDYGKKEISGDSEEMNINSVVTSADGENL EIQSYSLIGEKLVMEEAKTIVPPHVTDSKRVQKPAIAPPSKWNI SIFKEEPRSDQKQKSLLSFDVVDKVPQQPKSASSNFASKNITKE SEKPESIILPVEESKGSLIDFSEDRLKKEMQNPTSLKISEEETK LRSVSPTEKKDRNLENR\SYTL\AEKKVLAEKQNSV\APLELRDS NEIGKTQITLGSRSTELKESKADAMPQHFYQNEDYNERPKIIVG SEKEKDEKKKK
6832	1809	412	MGSGLISGPPQDNSGEALKEPERAQEHSLPNFAGGQHFFEYLLV VSLKKKRSEDDYEPIITYQFPKRENLLRGQQEEEERLLKAIPLF CFPDGNEWASLTEYPRETFSFVLTNVDGSRKIGYCRRLLPAGPG PRLPKVYCIISCIGCFGLFSKILDEVEKRHQISMAVIYPFMQGL REAAFPAPGKTVTLKSFIPDSGTRFISLTRPLDSHLEHVDFSSL LHCLSFEQILQIFASAVLERKIIFLAEGLSTLSQCIHAAAALLY PFSWAHTYIPVVPESLLATVCCPTPFMVGVQMRFQQEVMDSPME EVLLVNLCEGTFLMSVGDEKDILPPKLQDDILDSLGQGINELKT AEQINEHVSGPFVQFFVKIVGHYASYIKREANGQGHFQERSFCK ALTSKTNRRFVKKFVKTQLFSLFIQEAEKSKNPPAGYFQQKILE YEEQKKQ/TETKGKNCEIRAVVNKND
6833	1	1129	PLMTLSQCGGIPGHGHSHGGHGHGHGLPKGPRVKSTRPGSSDIN VAPGEQGPDQEETNTLVANTSNSNGLKLDPADPENPRSGDTVEV QVNGNLVREPDHMELEEDRAGQLNMRGVFLHVLGDALGSVIVVV

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			NALVFYFSWKGCSEGDFCVNPCFPDPCKAFVEIINSTHASVYEAGPCWVLYLDPTLCVVMVCILLYTTYPLLKESALILLQTVPKQIDIRNLIKELRNVEGVEEVHELHVWQLAGSRIIATAHIKCEDPTSYMEVAKTIKDVFHNHGIHATTIQPEFASVGSKSSVVPCELACRTQCALKQCCGTLPQAPSGKDAEKTPAVSISCLELSNNLEKKPRRTKAENIPA\VVIEIKN\IPNK\QPESSL
6834	78	1151	AGQERPAPIWRLLWLPTPSVSRKAEPAHIPINR*GA*E*RGGLPLCGSSASAYGWH*RLTPWSPGGS*HM*SSKAPVTQAREVLVAGPCSKLVLSGARGIVGTTVQVLVEAQQPLLLLFTGVWGLNLRAGEESRAL*LIEEVTQVRDAHLGNAVVGCAQCLSQGQVGSALAKALLEAAAAVRDCKEVLTVSGDKQQAEVSVRL*VRDVCVEEAGCVEFGQAHGRPGLALAKGRGGTNEVEEQVQVDGVQKLVLSAHECHELVAGQQDGEDQAARTRLLQAGAHSVAHGRRQGQAPCRPHQEAGVSCHELQQVVGDAL*ARE*APQIIVLLLLEDVAQLRTGKKA*DLVVDVEQLLRQL
6835	3	834	GIPAADR\EASLELIKLDISRTFPNLCIFQQGGPYHDMLHSILGAYTCYRPDVGYVQGMSFIAAVLILNLDTADAFIAFSNLLNKPCQMAFFRVDHGLMLTYFAAFEVFFEENLPKLFAHFKKNNLTPDIYLIDWIFTLYSKSLPLDLACRIWDVFCRDGEEFLFRTALGILKLFEDILTKMDFIHMAQFLTRLPEDLPAEELFASIATIQMQSRNKKWAQVLTALQKDSREMREGKSVPPTLRLQREFALGTNQSPMPRPLCCFRLTPGQPRRTDAL
6836	3	850	MSCGRPPPDVDGMITLKV\DNLTYRTSPDSLRRVFEKYGRVGDVYIPREPHTKAPRGFAFVRFHDRRDAQDAEAAMDGAELDGRELRVQVARYGRRDLPRSRQGRRHAAGPEAA/RYGRRSRSYGRRSRSPRRRHRSRSRGPSCSRSRSRSRYRGSRYSRSFYSRSPYSRSRYSRSPYSRSRYRESRYGGSHYSSSGYSNSRYSRYHSSRSHSKSGSSTSSRSASTSKSSSARRSKSSSVSRSRSRSRSSSMTRSPPRVSKRKSKSRSRSKRPPKSPEEEGQMSS
6837	3	1369	TDGAAVAGNPGSDYFPGGTAP/GGPRTRRP\SGTSSSGSKASGPPNPPAQGDGTSLSPNYTLESTSGNDGKPVSGGGGRGRGRRKRDSGHVSPGTFFDKYSAAPDSGGAPGVSPGQQQASGAAVGGSSAGETRGAPTPHEKALTSPSWGKGAELLLGDQPDLIGSLDGGAKSDSSSPNVGEFASDEVSTSYANEDEVSSSSDNPQALVKASRSPLVTGSPKLPPRGVGAGEHGPKAPPPALGLGIMSNSTSTPDSYGGGGGPGHPGTPGLEQVRTPTSSSGAPPPDEIHPLEILCAQIQLQRQQFSISEDQPLGLKGGKKGECAVGASGAQNGDSELGSCCSEAVKSAMSTIDLDSLMAEHSAAWYMPADKALVDSADDDKTLAPWEKAKPQNPNSKEAHDLPANKASASQPGSHLQCLSVHCTDDVGDAKARASVPTWRSLHSDISNRFGTFVAALT
6838	16	499	LTDTPPPKTHMIHHSISDYKATLKCWALGFYPMEITLTWQQDEEDQTRDMELVETRPAGDGTFQKWAAVVVPSGEE/Q/RYMCHVQHEGLPEPLTLRWEQSSQPTIPIVGIVAGLVLLGAVVTGAVVSAVMCRKKNSDRVSYSEAASSDHAQGSDVSLTACKV
6839	3	1195	AAPAGGGPDPEALSAFPGRHLSGLSWPQVKRLDALLSEPIPIHGRGNFPTLSVQPRQIRAGGPQHPGGAG\IHVHRVRLHGSAASHVLHPESGLGYKDLDLVFRMDLRSEASFQLTKAVVLACLLDFLPAGVSRAKITPLTLKEAYVQKLVKVCTDSDRWSLISLSNKSGKNVELKFVDSVRRQFEFSIDSFQIILDSLLLFGQCSSTPMSEAFHPTVTGESLYGDFTEALEHLRHRVIATRSPEEIRGGGLLKYCHLLVRGFRPRPSTDVRALQRYMCSRFFIDFPDLVEQRRTLERYLEAHFGGADAARRYACLVTLHRVVNESTVCLMNHERRQTLDLIAALALQALAEQGPAATAALAWRPPGTDGVVPATVNYYVTPVQPLLAHAYPTWLPCN
6840	4254	2061	ELQGDFSVPDVPKSMAWCENSICVGFKRDYYLIRVDGKGSIKELFPTGKQLEPLVAPLADGKVAVGQDDLTVVLNEEGICTQKCALNW

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			TDIPVAMEHQPPYIIAVLPRYVEIRTFEFKLLVQSIELQRPRFITSGGSNIIYVASNHFVWRLIPVPMATQIQQLLQDKQFELALQLAEMKDDSDSEKQQQIHHIKNLYAFNLFCQKRFDESMQVFAKLGTDPTHVMGLYPDLLPTDYRKQLQYPNPLPVLSGAELEKAHLALIDYLTQKRSQLVKKLNDSDHQSSTSPLMEGTFTIKSKKKLLQIIDTTLLKCYLHTNVALVAPLLRLENNHCHIEESEHVLKKAHKYSELIILYEKKGLHEKALQVLVDQSKKANSPLKGHERTVQYLQHLGTENLHLIFSYSVWVLRDFPEDGLKIFTEDLPEVESLPRDRVLGFLIENFKGLAIPYLEHIIHVWEETGSRFHNCLIQLYCEKVQGLMKEYLLSFFAGKTPVPAGEEEGELGEYRQKLLMFLEISSYYDPGRLICDFPFDGLLEERALLLGRMGKHEQALFIYVHILKDTRMAEEYCHKHYDRNKDGNKDVYLSLLRMYLSFPSIHCLGPIKLELLEPKANLQAALQVLELHHSKLDTTKALNLLFANTQINDIRIFLEKVLEENAQKKRFNQVLKNLLHAEFLRV\QEERILHQQVKCIITEEKVCMVCKKKIGNSAFARYPNGVVVHYFCS\KEVNPADT
6841	1	3206	TPSTTGTKSNTPTSSVPSAAVTPLNESLQPLGDYGVGSKNSKRAREKRDSRNMEVQVTQEMRNVSIGMGSSDEWSDVQDIIDSTPELDMCPETRLDRTGSSPTQGIVNKAFGINTDSLYHELSTAGSEVIGDVDFGADLLGEFSGMGKEVGNLLLENSQLLETKNALNVVKNDLIAKVDQLSGEQEVLRGELEAAKQAKVKLENRIKELEEELKRVKSEAIIARREPKEEAEDVSSYLCTESDKIPMAQRRRFTRVEMARVLMERNQYKERLMELQEAVRWTEMIRASREHPSVQEKKKSTIWQFFSRLFSSSSPPPAKRPYPSGNIHYKSPTTAGFSQRRNHAMCPISAGSRPLEFFPDDDCTSSARREQKREQYRQVREHVRNDDGRLQACGWSLPAKYKQLSPNGGQEDTRMKNVPVPVYCRPLVEKDPTMKLWCAAGVNLSGWRPNEDDAGNGVKPAPGRDPLTCDREGDGEPKSAHTSPEKKKAKELPEMDATSSRVWILTSTLTTSKVVIIDANQPGTVVDQFTVCNAHVLCISSIPAASDSDYPPGEMFLDSDVNPEDPGADGVLAGITLVGCATRCNVPRSNCSRGDTPVLDKGQGEVATIANGKVNPSQSTEEATEATEVFDPGPSEPETATLRPGPLTEHVFTDPAPTPSSGPQPGSENGPEPDSSSTRPEPEPSGDPIGAGSSAAPTMWLGAQNGWLYVHSAVANWKKCLHSIKLKDSVLSLVHVKGRVLVALADGTLAIFHRGEDGQWDLSNYHLMDLGHPHHSIRCMAVVYDRVWCGYKNKVHVIQPKTMQIEKSFDAHPRRESQVRQLAWIGDGVWVSIRLDSTLRLYHAHTHQHLQDVDIEPYVSKMLGTGKLGFSFVRITALLVAGSRLWVGTGNGVVISIPLTETVVLHRGQ\LLG\LRANKTSPTSGEG\ARPGG\IIHVYG\DDSSDRAARSFIPYCSMAQAQLCFHGHRDAVKFFVSVPGNVLATLNGSVLDSPAEGPGPAAPASEVEGQKLRNVLVLSGGEGYIDFRIGDGEDDETEEGAGDMSQVKPVLSKAERSHIIVWQVSYTPE
6842	3	926	RCQQLSATILTDHQYLERTPLCAILKQKAPQQYRIRAKLRSYKPRRLFQSVKLHCPKCHLLQEVPHEGDLDIIFQDGATKTPDVKLQNTSLYDSKIWTTKNQKGRKVAVHFVKNNGILPLSNECLLLIEGGTLSEICKLSNKFNSVIPVRSGHEDLELLDLSAFFLIQGTVHHYGCKQWST*RSIQNLNSLVDKTSWIFSSVAEALGIVPLQYVFVMTFTLDDGTGVLEAYLMDSDKFFQIPASEVLMDDDLQKSVDMIMDMPCPPGIKIDAYPWLECFIKSYNVTNGTDNQICYQIFDTTVAEDVI
6843	2	851	NHRKVLSGAKRYECNECGKSFAYTSSLIKHRRIHTGERPYECSECGRSFAENSSLIKHLRVHTGERPYECVECGKSFRRSSSLLQHQRVHTRERPYECSECGKSFSLRSNLIHHQRVHTGERHECGQCGKSFSRKSSLIIHLRVHTGERPYECSDCGKSFAENSSLIKHLRVHTGERPYECIDCGKSFRHSSSFRRHQRVHTGMRPYK*SKFWKFSCPGFLLLQGQRVHTGSRCYECDKWGIFFS*NASFFT*KSAPTEEVPFECNECEKAFSPLSLVTTIFT
6844	244	642	EHQLAGFELRKTQTSMSLGTTREKTDRVKSTAYLSPQELEDVFYQYDVKSEIYSFGIVLWEIATGDIPFQGCNSEKIRKLVAVKRQQE

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			PLGEDCPSELREIIDECRAHDPSVRPSVDEILKKLSTFSK*CIK I
6845	3	1519	VAVRDECYWRHVFWDQDLWMLLFILMCHPETARARLEYRIRTLD GALENAQNLGYQGAKFAWESADSGLEVCPEDIYGVQEVHVNGAV GLAFELYYHTTQDLQLFREACGWDVVRAVAEFWCSKVEWSPREE KYHLRGVMSPDEYHSGVNNSVYTNVLVQNSLRFAAALAQDLGLP IPSQWLAVADKIKVPFDVEQNFHPEFDGYEPGEVVKQADVVLLG YPVPFSLSPDVRRKNLEIYEAVTSPQGPAMTWSMFAVGWMELKD AVRARGLLDRSFANMAEPFKVWTENADGSGAVNFLTGMGGFLQA VVFGCTGFRVTRAGVTFDPVCLSGISRVSVSGIFYCGNKLNFSF SEDSVTVEVTARAGPWAPHLEAELWPSQSRLSLLPGHKVSFPRS AGRIQMSPPKLPGSSSSEFPGRTFSDVRDPLQSPLWVTLGSSSP TESLTVDPASE*SGTGASETSLGPSLWFRLHPPLLGTLLACHPS PAARLSGKVHAAWPEFKAFCL
6846	213	1258	LYFLKTIK*LNRLAEHP*YENEKLTKLRNTIMEQYTRTEESARG IIFTKTRQSAYALSQWITENEKFAEVGVKAHHLIGAGHSSEFKP MTQNEQKEVISKFRTGKINLLIATTVAEEGLDIKECNIVIRYGL VTNEIAMVQARGRARADESTYVLVAHSGSGVIEHETVNDFREKM MYKAIHCVCNMKPEEYAHKILELQMQSIMEKKMKTKRNIAKHYK NNPSLITFLCKNCSVLACSGEDIHVIEKMHVNMTPEFKELYIV RENKTLQKKCADYQINGEIICKCGQAWGTMMVHKGLDLPCLKIR NFVVVFKNNSTKKQYKKWVELPITFPNLDYSECCLFSDED
6847	1450	348	SMCWNSDRLEMPLIDLALILYPPSYVPYTGHLSDDSLSRKYCLT WFEDALNGVL*RAEAIQPHCVNAGDRMEKFRQKYWNKLQTLRQQ PFAYGTLTVRSLLDTREHCLNEFNFPDPYSKVKQRENGVALRCF PGVVRSLDALGWEERQLALVKGLLAGNVFDWGAKAVSAVLESDP YFPGFEEAKRKLQERPWLVDSYSEWLQRLKGPPHKCALIFADNSG IDIILGVFPFVRELLLRGTEVILACNSGPALNDVTHSESLIVAE RIAGMDPVVHSALREERLLLVQTGSSSPCLDLSRLDKGLAALVR ERGADLVVIEGMGRAVHTNYHAALRCESLKLAVIKNAWLAERLG GRLFSVIFKYEVPAE
6848	19	16	AMWWNSLDGIRNIVLSNPKKRNTLSLAMLKSLQSDILHDADSND LKVIIISAEGPVFSSGHDLKELTEEQGRDYHAEVFQTCSKVMMH IRNHPVPVIAMVNGLATAAGCQLVASCDIAVASDKSSFATPGVN VGLFCSTPGVALARAVPRKVALEMLFTGEPISAQEALLHGLLNK VVPEAELQEETMRIARKIASLSRPVVSLGKATFYKQLPQDLGTA YYLTSQAMVDNLALRDGQEGITAFLQKRKPVWSHEPV*VEH
6849	70	821	SLGVDGSCLEQGSPAPRPQTDTSP*PVGNWATQQEDLYHQSYEC VCVLFASVPDFKEFYSESNINHEGLECLRLLNEIIADFDELLSK PKFSGVEKIKTIGSTYMAATGLNATSGQDAQQDAERSCSHLGTM VEFAVALGSKLDVINKHSFNNFRLRVGLNHGPVVAGVJGAQKPQ YDIWGNTVNVASRMESTGVLGKIQVTEETAWALQSLGYTCYSRG VIKVKGKGQLCTYFLNTDLTRTGPPSATLG
6850	2	1235	ARGLNHEWTFEKLRQHISRNAQDKQELHLFMLSGVPDAVFDLTD LDVLKLELIPEAKIPAKISQMTNLQELHLCHCPAKVEQTAFSFL RDHLRCLHVKFTDVAEIPAWVYLLKNLRELYLIGNLNSENNKMI GLESLRELRHLKILHVKSNLTKVPSNITDVAPHLTKLVIHNDGT KLLVLNSLKKMMNVAELELQNCELERIPHAIFSLSNLQELDLKS NNIRTIEEIISFQHLKRLTCLKLWHNKIVTIPPSITHVKNLESL YFSNNKLESLPVAVFSLQKLRCLDVSYNNISMIPIEIGLLQNLQ HLHITGNKVDILPKQLFKCIKLRTLNLGQNCITSLPEKVGQLSQ LTQLELKGNCLDRLPAQLGQCRMLKKSGLVVEDHLFDTLPLEVK EALNQDINIPPANGI
6851	1765	660	VSAQVSAREGENCLGWNLADSSQESYKSLEEAEDCYPPSLLTLD LRDLFNQVEQGPLLSCPKAGTDLSMGRAREVGWMAAGLMIGAGA CYCVYKLTIGRDDSEKLEEEGEEEWDDDQELDEEEPDIWFDFET

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			MARPWTEDGDWTEPGAPGGTEDRPSGGGKANRAHPIKQRPFPYE HKNTWSAQNCKNGSCVLDLSKCLFIQGKLLFAEPKDAGFPFSQD INSHLASLSMARNTSPTPDPTVREALCAPDNLNASIESQGQIKM YINEVCRETVSRCCNSFLQQAGLNLLISMTVINNMLAKSASDLK FPLISEGSGCAKVQVLKPLMGLSEKPVLAGELVGAQMLFSFMSL FIRNGNREILLETPAP
6852	1	407	RTRGEETYANFIKHNDGKNIFYAARTFATLFAVMFAMYIISGLT GFIGLNSIAVLCNLVMGLALIFLCTWAYVKYSGEFREIGTVIDQ IAETLWEQVLKPLGDNLMEENIRQSVTNSIKAGLTDQVSHHARL KTD
6853	3	469	GDSCAVCIELYKPNDLVRILTCNHIFKTCVDPWLLEHRTCPMC KCDILKALGIEVDVEDGSVSLQVPVSNEIFNSASSHEEDNRSET ASSGYASVQGTYEPPLEEHVQSTNESLQLVNHEANSVAVDVIPH VDNPTFEEDETPNQETAVREIKS
6854	1148	585	HESYIGTFDPGELCVCAAIOWLQDNSASYFLNRKLVYEFSTQAK PVKNTFLRMWIYSHHIYQQDLRKKILDVGKRLDVTGFCMTGKPG IICVEGFKEHCEEFWHTIRYPNWKHISCKHAESVETEGNGEDLR LFHSFEELLLEAHGDYGLRNDYHMNLGQFLEFLKKHKSEHVFCI LFGIESKSSDS
6855	1913	1148	GRVGGRVGRICSPLSGANEYIASTDTLKTEEVLLFTDQTDDLAK EEPTSLFQRDSETKGESGLVLEGDKEIHQIFEDLDKKLALASRF YIPEGCIQRWAAEMVVALDALHREGIVCRDLNPNNILLNDRGHI QLTYFSRWSEVEDSCDSDAIERMYCAPEVGAITEETEACDWWSL GAVLFELLTGKTLVECHPAGINTHTTLNMPEWVSEEARSLIQQL LQFNPLERLGAGVAGVEDIKSHPFFTPVDWAELMR
6856	1617	997	VTQLYVSVDASTKDSLKKIDRPLFKDFWQQFLDSLKALAVKQQR TVYRLTLVKAWNVDELQAYAQLVSLGNPDFIEVKGVTYCGESSA SSLTMAHVPWHEEVVQFVRELVDLIPEYEIACEHEHSNCLLIAH RKFKIGGEWWTWINYNRFQELIQEYEDSGGSKTFSAKDYMARTP HWALFGASERGFDPKDTRHQRKNKSKAISGC
6857	1	617	KGPEATAMVCVCSHPNCRQNHIKPSHSAAQTWCGSPTPASAPNH KLMAMEQGKTLPSATEDAKEEGLEAQISRLAELIGRLESKALWF DLQQRLSDEDGTNMHLQLVRQEMAVCPEQLSEFLDSLRQYLRGT TGVRNCFHITAVRLSDGFTFVIYEFWETEEAWKRHLQSPLCKAF RHVKVDTLSQFEALSRILVPAAWCTVGRD
6858	2	669	RSRGIKDFENDPPLSSCGIFQSRIAGDALLDSGIRISSVFASPA LRCVQTAKLILEELKLEKKIKIRVEPGIFEWTKWEAGKTTPTLM SLEELKEANFNIDTDYRPAFPLSALMPAESYQEYMDRCTASMVQ IVNTCPQDTGVILIVSHGSTLDSCTRPLLGLPPRECGDFAQLVR KIPSLGMCFCEENKEEGKWELVNPPVKTLTHGANAAFNWRNWIS GN
6859	1	1150	GETMFKKAKTKAKKKPRKRSDSSGGYNLSDIIQSPSSTGLLKSG KTNSVESLPELLTSDSEGSYAGVGSPRDLQSPDFTTGFHSDKIE AKVKPYVNGTSPVYSREDLKPWEKSPILKISAPQPIPSNRIDTT SSASWVAGSFSPVSPPVVDLRTIMEIEESRQKCGATPKSHLGKT VSHGVKLSQKQRKMIALTTKENNSGMNSMETVLFTPSKAPKPVN AWASSLHSVSSKSFRDFLLEEKKSVTSHSSGDHVKKVSFKGIEN SQAPKIVRCSTHGTPGPEGNHISDLPLLDSPNPWLSSSVTAPSM VAPVTFASIVEEELQQEAALIRSREKPLALIQIEEHAIQDLLVF YEAFGNPEEFVIVERTPQGPLAVPMWNKHGC
6860	1889	1515	DKDKKRQKKRGIFPKVATNIMRAWLFQHLTHPYPSEEQKKQLAQ DTGLTILQVNNWFINARRIIVQPMIDQSNRAVSQGAAYSPEGQP MGSFVLDGQQHMGIRPAGPMSGMGMNMGMDGQWHYM
6861	1889	1515	DKDKKRQKKRGIFPKVATNIMRAWLFQHLTHPYPSEEQKKQLAQ DTGLTILQVNNWFINARRIIVQPMIDQSNRAVSQGAAYSPEGQP

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			MGSFVLDGQQHMGIRPAGPMSGMGMNMGMDGQWHYM
6862	2	471	EEIDREFHNKLKLKEDKLEKQEKPVNGEDKGDSGVDTQNSEGNA DEEDPLGPNCYYDKTKSFFDNISCDDNRERRPTWAEERRLNAET FGIPLRPNRGRGGYRGRGGLGFRGGRGRGGGRGGTPTAPRGFRG GFRGGRGGREFADFEYRKTTAFGP
6863	2216	485	PQEPALKSEFSQVASNTIPLFLPQPNTCKDNGPCKQVCSTVGGS AICSCFPGYAIMADGVSCEDCDECLMGAHDCSRRQFCVNTLGSF YCVNHTVLCADGYILNAHRKCVDINECVTDLHTCSRGEHCVNTL GSFHCYKALTCEPGYALKDGECEDVDECAMGTHTCQPGFLCQNT KGSFYCQARQRCMDGFLQDPEGNCVDINECTSLSEPCRPGFSCI NTVGSYTCQRNPLICARGYHASDDGTKCVDVNECETGVHRCGEG QVCHNLPGSYRCDCKAGFQRDAFGRGCIDVNECWASPGRLCQHT CENTLGSYRCSCASGFLLAADGKRCEDVNECEAQRCSQECANIY GSYQCYCRQGYQLAEDGHTCTDIDECAQGAGILCTFRCLNVPGS YQCACPEQGYTMTANGRSCKDVDECALGTHNCSEAETCHNIQGS FRCLRFECPPNYVQVSKTKCERTTCHDFLECQNSPARITHYQLN PQTGLLVPAHIFRIGPAPAFTGDTIALNIIKGNEEGYFGTRRLN AYTGVVYLQRAVLEPRDFALDVEMKLWRQGSVTTFLAKMHIFFT TFAL
6864	2	2933	LADSSPSNLQIIIKELLSMHHQPDPALTKEFDYLPPVDSRSSSG FVGLRNGGATCYMNAVFQQLYMQPGLPESLLSVDDDTDNPDDSV FYQVQSLFGHLMESKLQYYVPENFWKIFKMWNKELYVREQQDAY EFFTSLIDQMDEYLKKMGRDQIFKNTFQGIYSDQKICKDCPHRY EREEAFMALNLGVTSCQSLEISLDQFVRGEVLEGSNAYYCEKCK EKRITVKRTCIKSLPSVLVIHLMRFGFDWESGRSIKYDEQIRFP WMLNMEPYTVSGMARQDSSEVGENGRSVDQGGGGSPRKKVALT ENYELVGVIVHSGQAHAGHYYSFIKDRRGCGKGKWYKFNDTVIE EFDLNDETLEYECFGGEYRPKVYDQTNPYTDVRRRYWNAYMLFY QRVSDQNSPVLPKKSRVSVVRQEAEDLSLSAPSSPEISPCSSPR PHRPNNDRLSILTKLVKKGEKKGLFVEKMPARIYQMVRDENLKF MKNRDVYSSDYFSFVLSLASLNATKLKHPYYPCMAKVSLQLAIQ FLFQTYLRTKKKLRVDTEEWIATIEALLSKSFDACQWLVEYFIS SEGRELIKIFLLECNVREVRVAVATILEKTLDSALFYQDKLKSL HQLLEVLLALLDKDVPENCKNCAQYFFLFNTFVQKQGIRAGDLL LRHSALRHMISFLLGASRQNNQIRRWSSAQAREFGNLHNTVALL VLHSDVSSQRNVAPGIFKQRPPISIAPSSPLLPLHEEVEALLFM SEGKPYLLEVMFALRELTGSLLALIEMVVYCCFCNEHFSFTMLH FIKNQLETAPPHELKNTFQLLHEILVIEDPIQVERVKFVFETEN GLLALMHHSNHVDSSRCYQCVKFLVTLAQKCPAAKEYFKENSHH WSWAVQWLQKKMSEHYWTLQSNVSNETSTGKTFQRTISAQDTLA YATALLNEKEQSGSSNGSESSPANENGDRHLQQGSESPMMIGEL RSDLDDVDP
6865	1820	1242	DPERWKHLSKVTPPGSSVSTTPVQVVRLQSPQSQGSMMPSCNRS CSCSRGPSVEDGKWYGVRSYLHLFYEGYAVPPKLEGIGEGEFLV LDQRAADYNQALGTCRLAGTALCVAAGVLLAICLFWAMIGWLSQ DTKAEPLDPEADSHVEVFGDEPEQQLSPIFRNASGQSWFSPPAS PFGQSSVQTIQPKRDS
6866	1571	491	DCPRPRYTLYGLRATCMRDLDWAWINAVSAFKALEQDLPVNIKF IIEGMEEAGSVALEELVEKEKDRFFSGVDYIVISDNLWISQRKP AITYGTRGNSYFMVEVKCRDQDFHSGTFGGILHEPMADLVALLG SLVDSSGHILVPGIYDEVVPLTEEEINTYKAIHLDLEEYRNSSR VEKFLFDTKEEILMHLWRYPSLSIHGIEGAFDEPGTKTVIPGRV IGKFSIRLVPHMNVSAVEKQVTRHLEDVPSKRNSSNKMVVSMTL GLHPWIANIDDTQYLAAKRAIRTVFGTEPDMIRDGSTIPIAKMF QEIVHKSVVLIPLGAVDDGEHSQNEKINRWNYIEGTKLFAAFFL EMAQLH

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6867	2833	1704	GTRIMSQPKQKELAGFVRQKMLLDYSVYMGRCVPQESRSPQRSP LQSAESSPTAGKKLPEVPPSEEEEQEAWVNALLGRIFWDFLGEK YWSDLVSKKIQMKLSKJKLPYFMNELTLTELDMGVAVPKILQAF KPYVDHQGLWIDLEMSYNGSFLMTLETKMNLTKLGKEPLVEALK VGEIGKEGCRPRAFCLADSDEESSSAGSSEEDDAPEPSGGDKQL LPGAEGYVGGHRTSKIMRFVDKITKSKYFQKATETEFIKKKIEE \ VSNTPLLLTVEVQECRGTLAVNIPPPPTDRVWYGFRKPPHVELK ARPKLGEREVTLVHVTDWIEKKLEQEFQKVFVMPNMDDVYITIM HSAMDPRSTSCLLKDPPVEAADQP
6868	1	340	RPTRPPTRPEEIKNLILPYISDMNFVQDLCEDFYELFKTDKGFD KATFESQMSVMRGQILNLTQALRDGKSPFQLVQIPCVIVERSQG GSQGRIVHLSNSFTQTVNCRKPFFSSW
6869	3	1619	MYMERMDKRALISFWESVEHLKNANKNEIPQLVGEIYQNFFVES KEISVEKSLYKEIQQCLVGNKGIEVFYKIQEDVYETLKDRYYPS FIVSDLYEKLLIKEEEKHASQMISNKDEMGPRDEAGEEAVDDGT NQINEQASFAVNKLRELNEKLEYKRQALNSIQNAPKPDKKIVSK LKDEIILIEKERTDLQLHMARTDWWCENLGMWKASITSGEVTEE NGEQLPCYFVMVSLQEVGGVETKNWTVPKRLSEFHNLHRKLSEC VPSLKKDQLPSLSKLPFKSIDHTFMEKFENQLNKFLQNLLSDER LCQSEALYAPLSPSFDYLKVIDVQGKKNSFSLSSFLERLPRDFF SHQEEETEEDSDLSDYGDDVDGRKDALAEPCFMLIGEIFELRGM . FKWVRRTLIALVQVTFGRTINKQIRDTVSWIFSEQMLVYYINIF RDAFWPNGKLAPPTTIRSKEQSQETKQRAQQKLLENIPDMLQSL VGQQNARHGIIKIFNALQETRANKHLLYALMELLLIELCPELRV HLDQLKAGQV
6870	1	1566	MAAVVAATRWWQLLLVLSAAGMGASGAPQPPNILLLLMDDMGWG DLGVYGEPSRETPNLDRMAAEGLLFPNFYSANPLCSPSRAALLT GRLPIRNGFYTTNAHARNAYTPQEIVGGIPDSEQLLPELLKKAG YVSKIVGKWHLGHRPQFHPLKHGFDEWFGSPNCHFGPYDNKARP NIPVYRDWEMVGRYYEEFPINLKTGEANLTQIYLQEALDFIKRQ ARHHPFFLYWAVDATHAPVYASKPFLGTSQRGRYGDAVREIDDS IGKILELLQDLHVADNTFVFFTSDNGAALISAPEQGGSNGPFLC GKQTTFEGGMREPALAWWPGHVTAGQVSHQLGSIMDLFTTSLAL AGLTPPSDRAIDGLNLLPTLLQGRLMDRPIFYYRGDTLMAATLG QHKAHFWTWTNSWENFRQGIDFCPGQNVSGVTTHNLEDHTKLPL IFHLGRDPGERFPLSFASAEYQEALSRITSVVQQHQEALVPAQP QLNVCNWAVMNWAPPGCEKLGKCLTPPESIPKKCLWSH
6871	209	1126	RMSLNPPIFLKRSEENSSKFVETKQSQTTSIASEDPLQNLCLAS QEVLQKAQQSGRSKCLKCGGSRMFYCYTCYVPVENVPIEQIPLV KLPLKIDIIKHPNETDGKSTAIHAKLLAPEFVNIYTYPCIPEYE EKDHEVALIFPGPQSISIKDISPHLQKRIQNNVRGKNDDPDKPS FKRKRTEEQEFCDLNDSKCKGTTLKKIIFIDSTWNQTNKIFTDE RLQGLLQVELKTRKTCFWRHQKGKPDTFLSTIEAIYYFLVDYHT DILKEKYRGQYDNLLFFYSFMYQLIKNAKCSGDKETGKLTH
6872	880	459	FGLLMVVLSLIFMKGNCVREDLIFNFLFKLGLDVRETNGLFGNT KKLITEVFVRQKYLEYRRIPYTEPAEYEFLWGPRAFLETSKMLV LRFLAKLHKKDPQSWPFHYLEALAECEWEDTDEDEPDTGDSAHG PTSRPPPR
6873	1929	955	DEQAVLCSKDKTYDLKIADTSNMLLFIPGCKTPDQLKKEDSHCN IIHTEIFGFSNNYWELRRRRPKLKKLKKLLMENPYEGPDSQKEK DSNSSKYTTEDLLDQIQASEEEIMTQLQVLNACKIGGYWRILEF DYEMKLLNHVTQLVDSESWSFGKVPLNTCLQELGPLEPEEMIEH CLKCYGKKYVDEGEVYFELDADKICRAAARMLLQNAVKFNLAEF QEVWQQSVPEGMVTSLDQLKGLALVDRHSRPEIIFLLKVDDLPE DNQERFNSLFSLREKWTEEDIAPYIQDLCGEKQTIGALLTKYSH SSMQNGVKVYNSRRPIS

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6874	1	307	DSIADHVNSAAVNVEEGTKNLGKAAKYKLAALPVAGALIGGMVGGPIGLLAGFKVAGIAAALGGGVLGFTGGKLIQRKKCKMMEKLTSSCIDLPSQTDKKCS
6875	1688	349	VIGTGERGNSASEKWEIMFNEELGDPFIIIHSISLLNAEEHSIATLLLRIEKEELDMKGSGFYVSLEWVTISKKNQDNKKYEIIKRDILRGKSVFHYAAIEPDGNGLMIVSYKSLTFVQAGQDLEENMDEDISEHIKEPLYYWQQTEDDLTVTIRLPEDNTKEDIQIQFLPDHINIVLKDHQFLEGKLYSSIDHESSTWIIKESNSLEISLIKKNEGLTWPELVIGDKQGELIRDSAQCAAIAERLMHLTSEELNPNPDKEKPPCNAQELEECDIFFEESSSLCRFDGNTLKTTHVVNLGSNQYLFSVIVDPKEMPCFCLRHDVDALLWQPHSSKQDDMWEHIATFNALGYVQASKRDKKFFACAPNYSYAALCECLRRVFIYRQPAPMSTVLYNRKEGRQVGQVAKQQVASLETNDPILGFQATNERLFVLTTKNLFLIKVNTEN
6876	41	1285	VGEMTLIWRHLLRPLCLVTSAPRILEMHPFLSLGTSRTSVTKLSLHTKPRMPPCDFMPERYQVIFLVNSGSEANELAMLMARAHSNNIDIISFRGAYHGCSPYTLGLTNVGIYKMELPGGTGCQPTMCPDVFRGPWGGSHCRDSPVQTIRKCSCAPDCCQAKDQYIEQFKDTLSTSVAKSIAGFPAEPIQGVNGVVQYPKGFLKEAFELVRARGGVCIANEVCTGFGRLGSHFWGFQTHDVLPDIVTMAKGIGNGFFMAAVITTPEIAKSLAKCLQHFNTFGGNPMACAIGSAVLEVIKEENLQENSQEVGTYMLLKFAKLRDEFEIVGDVRGKGLMIGIEMVQDKISCRPLPREEVNQIHEDCKHMGLLVGRGSIFSQTFRIAPSMCITKPEVDFAVEVFRSALTQHMERRAK
6877	1	778	GTSPSPARAYAPPTERKRFYQNVSITQGEGGFEINLDHRKLKTPQAKLFTVPSEALAIAVATEWDSQQDTIKYYTMHLTTLCNTSLDNPTQRNKDQLIRAAVKFLDTDTICYRVEEPETLVELQRNEWDPIIEWAEKRYGVEISSSTSIMGPSIPAKTREVLVSHLASYNTWALQGIEFVAAQLKSMVLTLGLIDLRLTVEQAVLLSRLEEEYCIQKWGNIEWAHDYELQELRARTAAGTLFIHLCSESTTVKHKLLKE
6878	933	263	QTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAFSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGIIAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENDFKHTKSFII
6879	3	845	IRVIGESDIMQEFLSESDENYNGVSDVELRVALPDGTTVTVRVKKNSTTDQVYQAIAAKVGMDSTTVNYFALFEVISHSFVRKLAPNEFPHKLYIQNYTSAVPGTCLTIRKWLFTTEBEILLNDNELAVTYFFHCAVDDVKKGYIKAEEKSYQLQKLYEQRKMVMYLNMLRTCEGYNEIIFPHCACDSRRKGHVITAISITHFKLHACTEEGQLENQVIAFEKDEMQRWDTDEEGMAFCFEYARGEKKPRWVKIFTPYFNYMHECFERVFCELKWRKEEY
6880	2110	1437	RKDNCTAKEWTFPEAKWNTTARVFSHIRLGMGHVLIIVQCFISSMANIYNEKILKEGNQLTESIFIQNSKLYFFGILFNGLTLGLQRSNRDQIKNCGFFYGHRAFSVALIFVTAFQGLSVAFILKFLDNMFHVLMAQVTTVIITTVSVLVFDFRPSLEFFLEAPSVLLSIFIYNASKPCVPEYAPRQERIRDLSGNLWERSSGDEELERLTKPKSDESDEDTT
6881	2638	2244	NDSKWEDIHVITGALKMFFRELPEPLFTFNHFNDFVNAIKQEPRQRVAAVKDLIRQLPKPNQDTMQILFRHLRRVIENGEKNRMTYQSIAIVFGPTLLKFEKETGNIAVHTVYQNQIVELILLELSSIFGR
6882	1	850	GIPFAQLWIYPVKSCKGCVPVSEAECTAMGLRSGNLRDRFWLVINQEGNMVTARQBPRLVLISLTCDGDTLTLSAAYTKDLLLPIKTPTTNAVHKCRVHGLEIEGRDCGEATAQWITSFLKSQPYRLVHFEPHMRPKRPHQIADLFRPKDQIAYSDTSPFLILSEASLADLNSRLEK

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			KVKATNFRPNIVISGCDVYAEDSWDELLIGDVELKRVMACSRCI LTTVDPDTGVMSRKEPLETLKSYRQCDPSERKLYGKSPLFGQYF VLENPGTIKVGDPVYLLGC
6883	2794	2256	RSKLKLNQNLKLFITLTYCVLSLHGWGPGIHLQKEGAFPVTQNR ALQLLYDLRYLNIVLTAKGDEVKSGRSKPDSRIEKVTDHLEALI DPFDLDVFTPHLNSNLHRLVQRTSVLFGLVTGTENQLAPRSSTF NSQEPHNILPLASSQIRFGLLPLSMTSTRKAKSTRNIETKAQYD ANC
6884	?	99	EFERVTAEAVKPRETSEPRAAAQRFCEKFPFL
6885	297	1554	STGQFWHVTDLHLDPTYHITDDHTKVCAESKGANASNPGPFGDV LCDSPYQLILSAFDFIKNSGQEASFMIWTGDSPPHVPVPELSTD TVINVITNMTTTIQSLFPNLQVFPALGNHDYWPQDQLSVVTSKV YNAVANLWKPWLDEEAISTLRKGGFYSQKVTTNPNLRIISLNTN LYYGPNIMTLNKTDPANQFEWLESTLNNSQONKEKVYIIAHVPV GYLPSSQNITAMREYYNEKLIDIFQKYSDVIAGQFYGHTHRDSI MVLSDKKGSPVNSLFVAPAVTPVKSVLEKCTNNPGIRLFQYDPR DYKLLDMLCYYLNLTEANLKGESIWKLEYILTQTYDIEDLQPES LYGLAKQFTILDSKQFIKYYNYFFVSYDSSVTCDKTCKAFQICA IMNLDNISYADCLKQLYIKHNY
6886	?	1341	QCGGIPGREGGSSRPLEEGTGSSPACVRGAAPGSEDAFYPTRAK QARVSQELKKAAKRTVSISEGPDTLGDGMRERRETLALAPEPEP LEKEACEKWKRPFRSASATSLTLSHCVDVVKGLLDFKKRRGHSI GGAPEQRYCIIPVCVAARLPTRAQDVLDAHLSEVNAVRFGPNSS LLATGGADRLIHLWNVVGSRLEANQTLEGAGGSITSVDFDPSGY QVLAATYNQAAQLWKVGEAQSKETLSGHKDKVTAAKFKLTRHQA VTGSRDRTVKEWDLGRAYCSRTINVLSYCNDVVCGDHIIISGHN DQKIRFWDSRGPHCTQVIPVQGRVTSLSLSHDQLHLLSCSRDNT LKVIDLRVSNIRQVFRADGFKCGSDWTKAVFSPDRSYALAGSCD GALYIWDVDTGKLESRLQGPHCAAVNAVAWCYSGSHMVSVDQGR KVVLWQ
6887	1047	116	WTARPSQKFFWEAGAVPGDPLSTGCSQAQLGGCCPRGPWGPQHG GQQRAAGPTLPRGERGGPQQSGPGLAAQTPPTSKQVAWRAFLTG TYRSQSPRSPAGPFRGGTGWWPEPAVCLCVAVGPQRLSSPGLVY NASGSEHCYDIYRLYHSCADPTGCGTGPDARAWDYQACTEINLT FASNNVTDMFPDLPFTDELRQRYCLDTWGVWPRPDWLLTSFWGG DLRAASNIIFSNGNLDPWAGGGIRRNLSASVIAVTIQGGAHHLD LRASHPEDPASVVEARKLEATIIGEWVKAARREQQPALRGGPRL SL
6888	1	992	FVAYVKKEIPHIVVTHCLLKPHALVIKTLPTKLRDALFTVVRVI NFIKGRAPNHRLFQAFFEEIGIEYSVLLFHTEMRWLSRGQILTH IFEMYEEINQFLHHKSSNLVDGFENKEFKIHLAYLADLFKHLNE LSASMQRTGMNTVSAREKLSAFVRKFPFWQKRIEKRNFTNFPFL EEIIVSDNEGIFIAAEITLHLQQLSNFFHGYFSIGDLNEASKWI LDPFLFNIDFVDDSYLMKNDLAELRASGQILMEFETMKLEDFWC AQFTAFPNLAKTALEILMPFATTYLCELGFSITFTFQNKVPEAA LILSDDIRVAISKKVPSFLGHH
6889	1	1534	LTLENQIKEEREQDNSESPNGRTSPLVSQNNEQGSTLRDLLTTT AGKLRVGSTDAGIAFAPVYSMGAPSSKSGRTMPNILDDIIASVV ENKIPPSKTSKINVKPELKEEPEESIISAVDENNKLYSDIPHSW ICEKHILWLKDYKNSSNWKLFKECWKQGQFAVVSGVHKKMNISL WKAESISLDFGDHQADLLNCKDSIISNANVKEFWDGFEEVSKRQ KNKSGETVVLKLKDWPSGEDFKTMMPARYEDLLKSLPLPEYCNP EGKFNLASHLPGFFVRPDLGPRLCSAYGVVAAKDHDIGTTNLHI EVSDVVNILVYVGIAKGNGILSKAGILKKFEEEDLDDILRKRLK DSSEIPGALKHIYAGKDVDKIREFLQKISKEQGLEVLPEHDPIR DQSWYVNKKLRQRLLEEYGVRTWTLIQFLGDAIVLPAGALHQVQ

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			NFHSCIQVTEDFVSPEHLVESFHLTQELRLLKEEINYDDKLQVK NILYHAVKEMVRALKIHEDEVDDMEEN
6890	3	667	THACGMWIPLYLERALVVEKTAETCNSPPCGAKDSLIFGAITCF TGFLGVDTGAGATRWCRLKTQRADPLVCAVGMLGSAIFICLIFV AAKSSIVGAYICIFVGETLLFSNWAITADILMYVVIPTRRATAV ALQSFTSHLLGDAGSPYLIGFISDLIRQSTKDSPLWEFLSLGYA LMLCPFVVVLGGMFFLATALFFVSDRARAEQQVNQLAMPPASVK V
6891	1980	1262	LRIHQELLSKELKLLRGITIESIIHIGLAAGKEQFMQDASNVMQ LLLKTQSHLYNMEDNNPEVRQAAAYGLGVMAQFGGDDYRSLCSE AVPLLVKVIKRAHSKTKKNVIATENCISAIGKILKFKPNCVNVD EVLPHWLSWLPLHEDKEEAIQTLSFLCDLIESNHPVVIGPNNSN LPKIISIIAEGKINETINYEDPCAKRLANVVRQVQTSEDLWLEC VSQLDDEQQEALQELLNFA
6892	3	876	RSVAAASGPGAWGTDHYCLELLRKRDYEGYLCSLLLPAESRSSV FALRAFNVELAQVKDSVSEKTIGLMRMQFWKKTVEDIYCDNPPH QPVAIELWKAVKRHNLTKRWLMKIVDEREKNLDDKAYRNIKELE NYAENTQSSLLYLTLEILGIKDLHADHAASHIGKAQGIVTCLRA TPYHGSRRKVFLPMDICMLHGVSQEDFLRRNQDKNVRDVIYDIA SQAHLHLKHARSFHKTVPVKAFPAFLQTVSLEDFLKKIQRVDFD IFHPSLQQKNTLLPLYLYIQSWRKTY
6893	1	842	DGERKSMSVERTFSEINKAEEQYSLCQELCSELAQDLQKERLKG RTVTIKLKNVNFEVKTRASTVSSVVSTABEIFAIAKELLKTEID ADFPHPLRLKLMGVRISSFPNEEDRKHQQRSIIGFLQAGNQALS ATECTLEKTDKDKFVKPLEMSHKKSFFDKKRSERKWSHQDTFKC EAVNKQSFQTSQPFQVLKKKMNENLEISENSDDCQILTCPVCFR AQGCISLEALNKHVDECLDGPSISENFKMFSCSHVSATKVNKKE NVPASSLCEKQDYEAH
6894	1742	1463	TTLCKPLVPREHQFYETLPAEMRKFTPQYKGKSQLLEGLPHWRG DVRDRGHGRPWQPSLEPSLFPTLCFPSLSSFSSSWPSAQHLTPS VFNPW
6895	2379	478	VTYVELCDLASPTALLIMRTVLDLIVEDLQSTSEDKEQQYTSQT TRLLALLYALASHKACKLAILHLINGTIKGDERYAEIFQDLLAL VRSPGDSVIRQQCVEYVTSILQSLCDQDIALILPSSSEGSISEL EQLSNSLPNKELMTSICDCLLATLANSESSYNCLLTCVRTMMFL AEHDYGLFHLKSSLRKNSSALHSLLKRVVSTFSKDTGELASSFL EFMRQILNSDTIGCCGDDNGLMEVEGAHTSRTMSINAAELKQLL QSKEESPENLFLELEKLVLEHSKDDDNLDSLLDSVVGLKQMLES SGDPLPLSDQDVEPVLSAPESLQNLFNNRTAYVLADVMDDQLKS MWFTPFQAEEIDTDLDLVKVDLIELSEKCCSDFDLHSELERSFL SEPSSPGRTKTTKGFKLGKHKHETFITSSGKSEYIEPAKRAHVV PPPRGRGRGGFGQGIRPHDIFRQRKQNTSRPPSMHVDDFVAAES KEVVPQDGIPPPKRPLKVSQKISSRGGFSGNRGGRGAFHSQNRF FTPPASKGNYSRREGTRGSSWSAQNTPRGNYNESRGGQSNFNRG PLPPLRPLSSTGYRPSPRDRASRGRGGLGPSWASANSGSGGSRG KFVSGGSGRGRHVRSFTR
6896	1	555	GNIVIQKKKYNKQHIIPLENVTIDSIKDEGDLRNGWLIKTPTKS FAVYAATATEKSEWMNHINKCVTDLLSKSGKTPSNEHAAVWVPD SEATVCMRCQKAKFTPVNRREHCRKCGFVVCGPCSEKRFLLPSQ SSKPVRICDFCYDLLSAGDMATCQPARSDSYSCSLKSPLNDMSD DDDDDDSSD
6897	3	920	GDGLMHEVVNGLMERPDWETAIQKPLCSLPAGSGNALAASLNHY AGYEQVTNEDLLTNCTLLLCRRLLSPMNLLSLHTASGLRLFSVL SLAWGFIADVDLESEKYRRLGEMRFTLGTFLRLAALRTYRGRLA YLPVGRVGSKTPASPVVVQQGPVDAHLVPLEEPVPSHWTVVPDE DFVLVLALLHSHLGSEMFAAPMGRCAAGVMHLFYVRAGVSRAML

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SEQ ID NO:	Predicted beginning nucleotide location corresponding to first amino acid residue of amino acid sequence	Predicted end nucleotide location corresponding to first amino acid residue of amino acid sequence	Amino acid segment containing signal peptide (A=Alanine, C=Cysteine, D=Aspartic Acid, E= Glutamic Acid, F=Phenylalanine, G=Glycine, H=Histidine, I=Isoleucine, K=Lysine, L=Leucine, M=Methionine, N=Asparagine, P=Proline, Q=Glutamine, R=Arginine, S=Serine, T=Threonine, V=Valine, W=Tryptophan, Y=Tyrosine, X=Unknown, *=Stop Codon, /=possible nucleotide deletion, \=possible nucleotide insertion)
			LRLPLAMEKGRHMEYECPYLVYVPVVAFRLEPKDGKGVFAVDGE LMVSEAVQGQVHPNYFWMVSGCVEPPPSWKPQQMPPPEEPL
6898	919	346	QKTVTAVASLLKGRQGIYTENERRMGAVIKIRFFKIMLVLIICW LSNIINESLLFYLEMQTDINGGSLKPVRTAAKTTWFIMGILNPA QGFLLSLAFYGWTGCSLGFQSPRKEIQWESLTTSAAEGAHPSPL MPHENPASGKVSQVGGQTSDEALSMLSEGSDASTIEIHTASESC NKNEGDFALPTHGDL
6899	120	827	MKVRKNNDAYLLDKNKINMDCFISCFFKKMLTTLMFSHSGILSL LEHGEEYTFSLPCAYARSILTVPWVELGGKVSVNCAKTGYSASI TFHTKPFYGGKLHRVTAEVKHNITNTVVCRVQGEWNSVLEFTYS NGETKYVDLTKLAVTKKRVRPLEKQDPFESRRLWKNVTDSLRES EIDKATEHKHTLEERQRTEERHRTETGTPWKTKYFIKEGDGWVY HKPLWKIIPTTQPAE
6900	3	451	TEVLGSKGIHELRSSTSALHHALEESASLLTMFWRAALPSTHIP VLPGKVGESTERELLELRTKVSQQEQLLOSTTEHLKNANQQKES MEQFIVSQLTRTHDVLKKARTNLEVRKLLHQSEAPSLSPTHHHP LADLVGDSWPALRFQEK
6901	1	203	DDNMVQRLETDFKMTLQQQSTLEQWAAWLDNVMMQALKPYEGRP SFPKAARQFLLKWSFYRYHLGFS
6902	2	267	GAPPPPPSQPPRQPPQAAPSSEPHSDLTFNPSSALEGQAGAOGA SDMPEPSLDLLPELTNPDELLSYLDPPDLPSNSNDDLLSLFENN
6903	1	149	RINQVYRQGPTGIHILVIDQMVQNFQDESCFLFSTVKAESSDGI HIILK
6904	464	2092	MEASLPVSLSCVLACGDVEGKFDILFNRVQAIQKKSGNPDLLLC VGNFFGSTQDAEWEEYKTGIKKAPIQTYVLGANNQETVKYFQDA DGCELAENIITYLGRKGIFTGSSGLQIVYLSGTESLNEPVPGYSF SPKDVSSLRMMLCTTSQFKGVDILLTSPWPKCVGNFGNSSGEVD TKKCGSALVSSLATGLKPRYHFAALEKTYYERLPYRNHIILQEN AQHATRFIALANVGNPEKKKYLYAFSIVPMKLMDAAELVKQPPD VTENPYRKSGQEASIGKQILAPVEESACQFFFDLNEKQGRKRSS TGRDSKSSPHPKQPRKPPQPPGPCWFCLASPEVEKHLVVNIGTH CYLALAKGGLSDDHVLILPIGHYQSVVELSAEVVEEVEKYKATL RRFFKSRGKWCVVFERNYKSHHLQLQVIPVPISCSTTDDIKDAF ITQAQEQQIELLEIPEHSDIKQIAQPGAAYFVVELDTGEKLFHR IKKNFPLQFGREVLASEAILNVPDKSDWRQCQISKEDEETLARR FRKDFEPYDFTLDD
6905	1	226	VSKTGEAETITSHYLFALGVYRTLYLFNWIWRYHFEGFFDLIAI VAGLVQTVLYCDFFYLYITKVLKGKKLSLPA
6906	3	611	SYDDHNGHIDFITAASNLRAKMYSIEPADRFKTKRIAGKIIPAI ATTTATVSGLVALEMIKVTGGYPFEAYKNWFLNLAIPIVVFTET TEVRKTKIRNGISFTIWDRWTVHGKEDFTLLDFINAVKEKYGIE PTMVVQGVKMLYVPVMPGHAKRLKLTMHKLVKPTTEKKYVDLTV SFAPDIDGDEDLPGPPVRYYFSHDTD
6907	2	2228	LRGVPVWAAGAFRFSSGEESTSHLIMSRRSQRLTRYSQGDDDGS SSSGGSSVAGSQSTLFKDSPLRTLKRKSSNMKRLSPAPQLGPSS DAHTSYYSESLVHESWFPPRSSLEELHGDANWGEDLRVRRRRGT GGSESSRASGLVGRKATEDFLGSSSGYSSEDDYVGYSDVDQQSS SSRLRSAVSRAGSLLWMVATSPGRLFRLLYWWAGTTWYRLTTAA SLLDVFVLTRRFSSLKTFLWFLLPLLLLTCLTYGAWYFYPYGLQ TFHPALVSWWAAKDSRRADEGWEARDSSPHFQAEQRVMSRVHSL ERRLEALAAEFSSNWQKEAMRLERLELRQGAPGQGGGGGLSHED TLALLEGLVSRREAALKEDFRRETAARIQEELSALRAEHQQDSE DLFKKIVRASQESEARIQQLKSIWQSMTQESFQESSVKELRRLE DQLAGLQQELAALALKQSSVAEEVGLLPQQIQAVRDDVESQFPA WISQFLARGGGGRVGLLQREEMQAQLRELESKILTHVAEMQGKS

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			AREAAASLSLTLQKEGVIGVTEEOVHHIVKQALQRYSEDRIGLA DYALESGGASVISTRCSETYETKTALLSLFGIPLWYHSQSPRVI LQPDVHPGNCWAFQGPQGFAVVRLSARIRPTAVTLEHVPKALSP NSTISSAPKDFAIFGFDEDLQQEGTLLGKFTYDQDGEPIQTFHF QAPTMATYCVVELRILTNWGHPEYTCIYRFRVHGEPAH
6908	3	780	QVPSAAWLMAVCGLGSRLGLGSRLGLQGCFGAARLLYPRFQSRG PQGVEDGDRPQPSSKTPRIPKIYTKTGDKGFSSTFTGERRPKDD QVFEAVGTTDELSSAIGFALELVTEKGHTFAEELQKIQCTLQDV GSALATPCSSAREAHLKYTTFKAGPILELEQWIDKYTSQLPPLT AFILPSGGKISSALHFCRAVCRRAERRVVPLVQMGETDANVAKF LNRLSDYLFTLARYAAMKEGNQEKIYKKNDPSAESEGL
6909	3	409	GRLLAVGTDLYGQRSSAPEQELLVQDATPVSNSLLPEKAFSDIF SPYLRGTIKMMQAVRQAFQDQDDRRTWDGRPLTMAATFDDCLYA LCVVDTIKRSSQTGEWQNIAIMTEEPELSPAYLISEAMRRSRMS LYC
6910	1	1068	LVPVVVIDSYYYGKLVIAPLNIVLYNIFTPHGPDLYGTEPWYFY LINGFLNFNVAPALALLVLPLTSLMEYLLQRFHVQNLGHPYWLT LAPMYIWFIIFFIQPHKEERFLFPVYPLICLCGAVALSALQHSF LYFQKCYHFVFQRYRLEHYTVTSNWLALGTVFLFGLLSFSRSVA LFRGYHGPLDLYPEFYRIATDPTIHTVPEGRPVNVCVGKEWYRF PSSFLLPDNWQLQFIPSEFRGQLPKPFAEGPLATRIVPTDMNDQ NLEEPSRYIDISKCHYLVDLDTMRETPREPKYSSNKEEWISLAY RPFLDASRESKLLRAFYVPFLSDQYTVYVNYTILKPRKAKQIRK KSGG
6911	1184	966	GEDAEEMETGNVANLISIFGSSFSGLLRKSPGGGREEEEGEESG PEAAEPGCICCDKPVLRDMNPWSTAIVAF
6912	1	844	AMKPVETHSFOMLFTILSTGSALKAQSYEDAYRCIKSSILLGSI SGGTDIISCFMGHNFSLPVYKGEIQARNLGMAVEAWNEEGKAVW GESGELVCTKPIPCQPTHFWNDENGNKYRKAYFSKFPGIWAHGD YCRINPKTGGIVMLGRSDGTLNPNGVRFGSSEIYNIVESFEEVE DSLCVPQYNKYREERVILFLKMASGHAFQPDLVKRIRDAIRMGL SARHVPSLILETKGIPYTLNGKKVEVAVKQIIAGKAVEQGGAFS NPETLDLYRDIPELQGF
6913	1643	1558	KKSHEESHKEELSYGAQASLPLPCSDFR
6914	1251	615	ELAAECKSAGYPGTLIPYRCDLSNEEDILSMFSAIRSQHSGVDI CINNAGLARPDTLLSGSTSGWKDMFNVNVLALSICTREAYQSMK ERNVDDGHIININSMSGHRVLPLSVTHFYSATKYAVTALTEGLR QELREAQTHIRATCISPGVVETQFAFKLHDKDPEKAAATYEQMK CLKPEDVAEAVIYVLSTPAHIQIGDIQMRPTEQVT
6915	254	652	GRSLSFKTFLIWVLISIYQGGILMYGALVLFESEFVHVVAISFT ALILTELLMVALTVRTWHWLMVVAEFLSLGCYVSSLAFLNEYFD VAFITTVTFLWKVSAITVVSCLPLYVLKYLRRKLSPPSYCKLAS
6916	254	652	GRSLSFKTFLIWVLISIYQGGILMYGALVLFESEFVHVVAISFT ALILTELLMVALTVRTWHWLMVVAEFLSLGCYVSSLAFLNEYFD VAFITTVTFLWKVSAITVVSCLPLYVLKYLRRKLSPPSYCKLAS
6917	254	652	GRSLSFKTFLIWVLISIYQGGILMYGALVLFESEFVHVVAISFT ALILTELLMVALTVRTWHWLMVVAEFLSLGCYVSSLAFLNEYFD VAFITTVTFLWKVSAITVVSCLPLYVLKYLRRKLSPPSYCKLAS
6918	28	921	PEAGTRSWREPDPEDLRRFLLSAACRSFPQWLPGGGGGQVSSCS DTDVPYLLLAVKSEPGRFAERQAVRETWGSPAPGIRLLFLLGSP VGEAGPDLDSLVAWESRRYSDLLLWDFLDVPFNQTLKDLLLLAW LGRHCPTVSFVLRAQDDAFVHTPALLAHLRALPPASARSLYLGE VFTQAMPLRKPGGPFYVPESFFEGGYPAYASGGGYVIAGRLAPW LLRAAARVAPFPFEDVYTGLCIRALGLVPQAHPGPLTAWPADRT ADHCAFRNLLLVRPLGPQASIRLWKQLQDPRLQC

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6919	850	41	QGRRELSGSVTCPFIQQEPKEMLTLSEYHERVRSQGQQLQQLQA ELDKLHKEVSTVRAANSERVAKLVFQRLNEDFVRKPDYALSSVG ASIDLQKTSHTYADRNTAYFWNRFSFWNYARPPTVILEPHVFPG NCWAFEGDQGCVVIQLPGRVQLSDITLQHPPPSVEHTGGANSAP RDFAVFFLLSFFTHQGLQVYDETEVSLGKFTFDVEKSEIQTFHL QNDPPAAFPKVKIQILSNWGHPRFTCLYRVRAHGVRTSEGAEGS AQGPH
6920	1418	591	EAQGPSKVHLTLKKKK
6921	2	1711	MNATRSEEQFHVINHAEQTLRKMENYLKEKQLCDVLLIAGHLRI PAHRLVLSAVSDYFAAMFTNDVLEAKQEEVRMEGVDPNALNSLV QYAYTGVLQLKEDTIESLLAAACLLQLTQVIDVCSNFLIKQLHP SNCLGIRSFGDAQGCTELLNVAHKYTMEHFIEVIKNQEFLLLPA NEISKLLCSDDINVPDEETIPHALMQWVGHDVQNRQGELGMLLS YIRLPLLPPQLLADLETSSMFTGDLECQKLLMEAMKYHLLPERR SMMQSPRTKPKKSTVGALYAVGGMDAMKGTTTIEKYDLRTNSWL HIGTMNGRRLCFGVAVIDNKLYVVGGRDGLKTLNTVECFNPVGK IWTVMPPMSTHRHGLGVATLEGPMYAVGGHDGWSYLNTVERWDP EGRQWNYVASMSTPRSTVGVVALNNKLYAIGGRDGSSCLKSMEY FDPHTNKWSLCAPMSKRRGGVGVATYNGFLYVVGGHDAPASNHC SRLSDCVERYLPKGDSWSTVAPLSVPRDAVAVCPLGDKLYVVGG YDGHTYLNTVFSYDAQRNEWKEEVPVNIGRAGACVVVVKLP
6922	1075	369	LTPPAGIRHEVKDREREREREREREKFPLDSTGSELKQNIHSIT GLPPAMQKVMYKGLAPEDKTLREIKVTSGAKIMGGGSTINDVLA VNTPKDAAQQLRKAEENKKEPLCRQKQHRKVLDKGKPEDVMPSV KGAQERLPTVILSGMYNKSGGKVRLTFKLEQDQLWIGTKERTEK LPMGSIKNVVSLPIEGHEDYHMMAFQLGPTEASYYWVYWVPTQY VDAIKDTVLGKWQYF
6923	2469	1660	LGLFCILPIDTLCAVLERDTLSIRESRLFGAVVRWAEAECQRQQ LPVTFGNKQKVLGKALSLIRFPLMTIEEFAAGPAQSGILSDREV VNLFLHFTVNPKPRVEYIDRPRCCLRGKECCINRFQQVESRWGY SGTSDRIRFTVNRRISIVGFGLYGSIHGPTDYQVNIQIIEYEKK QTLGQNDTGFSCDGTANTFRVMFKEPIEILPNVCYTACATLKGP DSHYGTKGLKKVVHETPAASKTVFFFFSSPGNNNGTSIEDGQIP EIIFYT
6924	2210	1235	PEERVICFVEYYLTAFHEGRKGALAKKPYNPIIGETFHCSWEVP KDRVKPKRTASRSPASCHEHPMADDPSKSYKLRFVAEQVSHHPP ISCFYCECEEKKLCVNTHVWTKSKFMGMSVGVSMIGEGVLRLLE HGEEYVFTLPSAYARSILTIPWVELGGKVSINCAKTGYSATVIF HTKPFYGGKVHRVTAEVKHNPTNTIVCKAHGEWNGTLEFTYNNG ETKVIDTTTLFVYPKKIRPLEKQGPMESRNLWREVTRYLRLGDI DAATEQKRHLIEKQRVEERKRENLRTPWKPKYFIQEGDCSGILQ SPLESTLMGLEVQSFPV
6925	2	1653	RGGAAGAAMEFTSVIEDKTIELMCSVPRSLWLGCANLVESMCAL SCLQSMPSVRCLQISNGTSSVIVSRKRPSEGNYQKEKDLCIKYF DQWSESDQVEFVEHLISRMCHYQHGHINSYLKPMLQRDFITALP EQGLDHIAENILSYLDARSLCAAELVCKEWQRVISEGMLWKKLI ERMVRTDPLWKGLSERRGWDQYLFKNRPTDGPPNSFYRSLYPKI IQDIETIESNWKCGRHNLQRIQCRSENSKGVYCLQYDDEKIISG LRDNSIKIWDKTSLECLKVLTGHTGSVLCLQYDERVIVTGSSDS TVRVWDVNTGEVLNTLIHHNEAVLHLRFSNGLMVTCSKDRSIAV WDMASATDITLKRVLVGHRAAVNVVDFDDKYIVSASGDRTIKVW STSTCEFVRTLNGHKRGIACLQYRDRLVVSGSSDNTIRLWDIEC GACLRVLEGHEELVRCIRFDNKRIVSGAYDGKIKVWDLQAALDP RAPASTLCLRTIVEHSGRVFRLQFDEFQIISSSHDDTILIWDFL NVPPSAQNETRSPSRTYTYISR
6926	1	733	SGRVAMDGLGLCFPEQGFPAGPPLLPPHMGGHYRDCQSLGAPPL

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			DGYPLPTPDTSPLDGVDPDPAFFAAPMPGDCPAAGTYSYAQVSD YAGPPEPPAGPMHPRLGPEPAGPSIPGLLAPPSALHVYYGAMGS PGAGGGRGFQMQPQHQHQHQHQHHPPGPGQPTPPPEALPCRDGT DPSQPAELLGEVDRTEFEQYLHFVCKPEMGLPYQGHDSGVNLPD SHGAISSVVSDASSAVYYCNYPDV
6927	2	1484	LTLCGDICLMLAQNANNRAAHLEEFHYQTKEDQEILHSLHRESS CQGFAWATDLSTDLESQLSVSCKCYEAANEILQFRDLKSQNPEH YVQVLKRMGNIRNEIGVFYMNQAAALQSERLVSKSVSAAEQQLW KKSFSCFEKGIHNFESIEDATNAALLLCNTGRLMRICAQAHCGA GDELKREFSPEEGLYYNKAIDYYLKALRSLGTRDIHFAVWDSVN WELSTTYFTMATLQQDYAPLSRKAQEQIEKEVSEAMMKSLKYCD VDSVSARQFLCQYRAATIHHRLASMYHSCLRNQVGDEHLRKQHR VLADLHYSKAAKLFQLLKDAPCELLRVQLERVAFAEFQMTSQNS NVGKLKTLSGALDIMVRTEHAFQLIQKELIEEFGQPKSGDAAAA ADASPSLNREEVMKLLSIFESRLSFLLLQSIKLLSSTKKKTSNN IEDDTILKTNKHIYSQLLRATANKTATLLERINVIVHLLGQLAA GSAASSNAVQ
6928	1086	777	EAIDLINNLLQVKMRKRYSVDKTLSHPWLQDYQTWLDLRELECK IGERYITHESDDLRWEKYAGEQGLQYPTHLINPSASHSDTPETE ETEMKALGERVSIL
6929	1749	607	RDQRGYRDDRSPAREPGDVSARTRSGGGGGRSATTAMPPPVPNG NLFQHDPQDLRHNGNVVVAGRPSCSRGPRRAIQKPQPAGGRRSG RGPAAGGLCLQPPDGGTCVPEEPPVPPMDWEALEKHLAGLQFRE QEVRNQGQARTNSTSAQKNERESIRQKLALGSFFDDGPGIYTSC SKSGKPSLSSRLQSGMNLQICFVNDSGSDKDSDADDSKTETSLD TPLSPMSKQSSSYSDRDTTEEESESLDDMDFLTRQKKLQAEAKM ALAMAKPMAKMQVEVEKQNRKKSPVADLLFHMPHISECLMKRSL KPTDLRDMTIGQLQVIVNDLHSQIESLNEELVQLLLIRDELHTE QDAMLVDIEDLTRHAESQQKHMAEKMPAK
6930	131	545	FKDTANVFVSLFQMRNNFRHYFIEPSQLKLFYDVITWIVTQVAI SYTVVPFVLLSIKPSLTFYSSWYYCLHILGILVLLLLPVKKTQR RKNTHENIQLSQSKKFDEGENSLGQNSFSTTNNVCNQNQEIASR HSSLKQ
6931	2	659	FVERLPNRFACLLVASGAAEGVSAQSFLHCFTMASTAFNLQVAT PGGKAMEFVDVTESNARWVQDFRLKAYASPAKLESIDGARYHAL LIPSCPGALTDLASSGSLARILQHFHSESKPICAVGHGVAALCC ATNEDRSWVFDSYSLTGPSVCELVRAPGFARLPLVVEDFVKDSG ACFSASEPDAVHVVLDRHLVTGQNASSTVPAVQNLLFLCGSRK
6932	2	1131	FVDSPGQGEQAEEEEGGIQMNSRMRAHSPAEGASVESSSPGPKK SDMCEGCRSLAAGHPGYISHDKETSIKYVSHQHPSHPQLFSIVR QACVRSLSCEVCPGREGPIFFGDEQHGFVFSHTFFIKDSLARGF QRWYSIITIMMDRIYLINSWPFLLGKVRGIIDELQGKALKVFEA EQFGCPQRAQRMNTAFTPFLHQRNGNAARSLTSLTSDDNLWACL HTSFAWLLKACGSRLTEKLLEGAPTEDTLVQMEKLADLEEESES WDNSEAEEEEKAPVLPESTEGRELTQGPAESSSLSGCGSWQPRK LPVFKSLRHMRQVGGRGTAHHELRRRANHGLCLPTRLASGPSTL KTLQEVTDSLLGGWLMAQGVGGII
6933	1431	890	SLNLHCTLPFPPHQYPAGYPSDKEGKKPKGQSKKQPSGTTKRPI SDDDCPSASKVYKASDSAEAIEAFQLTPQQQHLIREDCQNQKLW DEVLSHLVEGPNFLKKLEQSFMCVCCQELVYQPVTTECFHNVCK DCLQRSFKAQVFSCPACRHDLGQNYIMIPNEILQTLLDLFFPGY SKGR
6934	3030	2588	DRDHSQCGGIRRVALARVSSVKLISKAKIRTVKMTFIIVLAFIV CWTPPFFFVQMWSVWDANAPKEASAFIIVMLLASLNSCCNPWIYM LFTGHLFHELVQRFLCCSASYLKGRRLGETSASKKSNSSSFVLS HRSSSQRSCSQPSTA

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6935	886	543	NSALYVAGGNDGTSCLNSVERYSPKAGAWESVAPMNIRRSTHDL VAMDGWLYAVGGNDGSSSLNSIEKYNPRTNKWVAASCMFTRRSS VGVAVLELLNFPPPSSPTLSVSSTSL
6936	1347	567	KSHRRQFLSRALLEFFGKSHPPPHRLFRKSLNVGLHYSHIPFLT TCLHFLRKRLQKGEVGLSVETSKPQVPVGGLSRKKVPQEPWATV MEKRLQEAQLYKEEGNQRYREGKYRDAVSRYHRALLQLRGLDPS LPSPLPNLGPQGPALTPEQENILHTTQTDCYNNLAACLLQMEPV NYERVREYSQKVLERQPDNAKALYRAGVAFFHLQDYDQARHYLL AAVNRQPKDANVRRYLQLTQSELSSYHRKEKQLYLGMFG
6937	1	727	AVEFRCCPGRDPACFARGWRLDRVYGTCFCDQACRFTGDCCFDY DRACPARPCFVGEWSPWSGCADQCKPTTRVRRRSVQQEPQNGGA PCPPLEERAGCLEYSTPQGQDCGHTYVPAFITTSAFNKERTRQA TSPHWSTHTEDAGYCMEFKTESLTPHCALENRPLTRWMQYLREG YTVCVDCQPPAMNSVSLRCSGDGLDSDGNQTLHWQAIGNPRCQG TWKKVRRVDQCSCPAVHSFIFI
6938	3	719	NSRKLELAERVDTDFMQLKKRRQSSEKENDSGTLDTVGAVVVDH EGNVAAAVSSGGLALKHPGRVGQAALYGCGCWAENTGAHNPYST AVSTSGCGEHLVRTILARECSHALQAEDAHQALLETMQNKFISS PFLASEDGVLGGVIVLRSCRCSAEPDSSQNKQTLLVEFLWSHTT ESMCVGYMSAQDGKAKTHISRLPPGAVAGQSVAIEGGVCRLGEP SELTLQAECEASQRHFRT
6939	3	810	KVTAPRRPQRYSSGHGSDNSSVLSGELPPAMGRTALFHHSGGSS GYESLRRDSEATGSASSAPDSMSESGAASPGARTRSLKSPKKRA TGLQRRRLIPAPLPDTTALGRKPSLPGQWVDLPPPLAGSLKEPF EIKVYEIDDVERLQRPRPTPREAPTQGLACVSTRLRLAERRQQR LREVQAKHKHLCEELAETQGRLMLEPGRWLEQFEVDPELEPESA EYLAALERATAALEQCVNLCKAHVMMVTCFDISVAASAAIPGPQ KVDV
6940	1188	496	GKMAAQPLRHRSRCATPPRGDFCGGTERAIDQASFTTSMEWDTQ VVKGSSPLGPAGLGAEEPAAGPQLPSWLQPERCAVFQCAQCHAV LADSVHLAWDLSRSLGAVVFSRVTNNVVLEAPFLVGIEGSLKGS TYNLLFCGSCGIPVGFHLYSTHAALAALRGHFCLSSDKMVCYLL KTKAIVNASEMDIQNVPLSEKIAELKEKIVLTHNRLKSLMKILS EVTPDQSKPEN
6941	1	713	SLSRADSDFHGPHTCGHVLNVIIGSNVLALAEAQRQAEALGYQA VVLSAAMQGDVKSMAQFYGLLAHVARTRLTPSMAGASVEEDAQL HELAAELQIPDLQLEEALETMAWGRGPVCLLAGGEPTVQLQGSG KGGRNQELALRVGAELRRWPLGPIDVLFLSGGTDGQDGPTEAAG AWVTPELASQAAAEGLDIATFLAHNDSHTPFCCLQGGAHLLHTG MTGTNVMDTHLLFLRPK
6942	1	246	GDYVERYDPKTDTWTMGAPLSMPTNAVGGCLLGDRLYADGGYDG QTYLNTMESYDPQTNEWTQMASLNIGRAGACVVVIKQF
6943	1	739	PMATGDGAKTLAIHVKALTADSIRITWKATLPASSFRLSWLRLG HSPAGGSITETLVQGDKTEYLLTALEPKPTYIICMVTMETTNAY VADETPVCAKAETADSYGPTTTLNQEQNAGPMASLPLAGIIGGA VALVFLFLVLGAICWYVHQAGELLTRERAYNRGSRKKDDYMESG TKKDNSILEIRGPGLQMLPINPYRAKEEYVVHTIFPSNGSSLCK ATHTIGYGTTRGYRDGGIPDIDYSYT
6944	960	156	VANILLNGVKYESELTGSSERAEQPLSVGRLCSTICNMPKALRT LCVNHFLGWLSFEGMLLFYTDFMGEVVFQGDPKAPHTSEAYQKY NSGVTMGCWGMCIYAFSAAFYSAILEKLEEFLSVRTLYFIAYLA FGLGTGLATLSRNLYVVLSLCITYGILFSTLCTLPYSLLCDYYQ SKKFAGSSADGTRRGMGVDISLLSCQYFLAQILVSLVLGPLTSA VGSANGVMYFSSLVSFLGCLYSSLFVIYEIPPSDAADEEHRPLL LNV

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6945	2067	179	EGEDRGLPRTMGAALGTGTRLAPWPGRACGALPRWTPTAPAQGC HSKPGPARPVPLKKRGYDVTRNPHLNKGMAFTLEERLQLGIHGL IPPCFLSQDVQLLRIMRYYERCQSDLDKYIILMTLQDRNEKLFY RVLTSDVEKFMPIVYTPTVGLACQHYGLTFRRPRGLFITIHDKG HLATMLNSWPEDNIKAVVVTDGERILGLGDLGCYGMGIPVGKLA LYTACGGVNPQQCLPVLLDVGTNNEELLRDPLYIGLKHQRVHGK AYDDLLDEFMQAVTDKFGINCLIQFEDFANANAFRLLNKYRNKY CMFNDDIQGTASVAVAGILAALRITKNKLSNHVPGFQGAGEAAM G\IAHLLVMALE\KEGVPKA\EATRKIW\MVDF\KGLIVQGRDH LNHEKEMFAQD\HPEVNSLEEVVRLVKPTAIIGVAAIAEA\FTE QILRDMASFHERP\IIFALSNPTSKAECTA\EKCYRVTEGPRGF FAS\GSPF*GVLIWEMGKTFIPGGRGNNA*RVPRGWQLGVHSPG GDPGHIP\DEIFLPDSRAKLPQEVSEQHLSQGRLYP\PLST\IR NVFLRIAIKVFD*GYKHNLV\SYYPEPKD\KEAFCKIPGSYTPD YDSFYT\VDSYIWAQGKAMNVQTV
6946	133	2551	SCEYSGITVAPGDPCPGVAHLLAPSMASDTPESLMALCTDFCLR NLDGTLGYLLDKETLRLHPDIFLPSEI\CDRLVNEYVELVNAAC NF\EPHE\SFFNPLFRDPRKQPASRRIHL\RED\LVQD\QD\LE AIRKQDL\VEL\YLTN\CEKLSAKSLQTLRSFSHTLGVP*AFFG C\TNILLLRKENPGGL/CEDEYLPNPTCQVLVKDFTFEGFSRLR F\LKLGRMIDWVPVES\LLRPLNSLAALDLSGIQTSDAA\FLTQ WKDSL\VSLVL\YNMDLSDDIIR\VIVQLHKLRHLDISRDRLSS YYKFKLTREVLSLFVQKLGNLMSLDISG\HMILENCSISKIGKR EAGQTSI\EPSK\SSIIPFRGFEGGPLQF\LGVF*GIFCGRLTH IPAYKVSGDKNEEQVLNAIEAYTEHRPEITSRAINLLFDIARIE RCNQLLRALKLVITALKCHKYDRNIQVTGSAALFYLTNSEYRSE QSVKLRRQVIQVVLNGMESYQEVTVQRNCCLTLCNFSIPEELEF QYRRVNELLLSILNPTRQDESIQRIAVHLCNALVCQVDNDHKEA VGKMGFVVTMLKLTQKKLLDKTCDQVMEFSW\SALWNITDETPD NCEMFLNFNGMKLFLDCLNEFPEKQELHRNMLGLLGNVAEVKEL RPQLMTSQFISVFSNLLESKADGIEVSYNACGVLSHIMFDGPEA WGVCEPQREEVEERMWAAIQSWDINSRRNINYRSFEPILRLLPQ GISPVSCHWATWALYNLVSVYPDKYCPLLIKEGGMPLLRDIIKM ATARQETKEMARKVIEHCSNFKEENMDTSR
6947	2	1682	TSVSTIPRGLASARPQSRSWRCCPVWRRSPGRARGRGLKMLNVP SQSFPAPRSQQRVASGGRSKVPLKQGRSLMDWIRLTKSGKDLTG LKGRLIEVTEEELKKHNKKDDCWICIRGFVYNVSPYMEYHPGGE DELMRAAGSDGTELFDQVHRWVNYESMLKECLVGRMAIKPAVLK DYREEEKKVLNGMLPKSQVTDTLAKEGPSYPSYDWFQTDSLVTI /EHIY*TEGYQFRLNNS*SSE*FLYSRNNY*GLLISYTYW/R*A MRFRKIFLCGL/CESVGKIEIVLQKKENTSWDFLGHPLKNHNSL IPRKDTGLYYRKCQLISKEDVTHDTRLFCLMLPPSTHLQVPIGQ HVYLKLPITGTEIVKPYTPVSGSLLSEFKEPVLPNNKYIYFLIK IYPTGLFTPELDRLQIGDFVSVSSPEGNFKISKFQELEDLFLLA AGTGFTPMVKILNYALTDIPSLRKVKLMFFNKTEDDIIWRSQLE KLAPKDKRLDVEFVLSAPISEWNGKQGHISPALLSEFLKRNLDK SKVLVCICGPVPFTEQGVRLLHDLNFSKNEIHSFTA
6948	104	58	PDGAHSFFPDEYFTCSSLCLSCGVGCKKSMNHGKEGVPHEAKSR CRYSHQYDNRVYTCKACYERGEEVSVVPKTSASTDSPWMGLAKY AWSGYVIECPNCGVVYRSRQYWFGNQDPVDTVVRTEIVHVWPGT DGFLKDNNNAAQRLLDGMNFMAQSVSELSLGPTKAVTSWLTDQI APAYWRPNSQILSCNKCATSFKDNDTKHHCRACGEGFCDSCSSK TRPVPERGWGPAPVRVCDNCYEAR/TRPVSCYRGTSGR*RRRRT QETVE
6949	152	4656	GLRLCLSRPLTRPGDDSVGGSAMASGAGGVGGGGGGKIRTRRCH QGPIKPYQQGRQQHQGILSRVTESVKNIVPGWLQRYFNKNEDVC

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			SCSTDTSEVPRWPENKEDHLVYADEESSNITDGRITPEPAVSNT EEPSTTSTAST\YPDVLTRVSLYRSHLNFSMLESPALHCQPSTS SAFPIGSSGFSLVKEIKDSTSQHDDDNISTTSGFSSRASDKDIT VSKNTSLPPLWSPEAERSHSLSQHTATSSKKPAFNLSAFGTLSP SLGNSSILKTSQLGDSPFYPGKTTYGGAAAVRQSKLRNTPYQA PVRRQMKAKQLSAQSYGVTSSTARRILQSLEKMSSPLADAKRIP SIVSSFLNSPLDRSGIDITDFQAKREKVDSQYPPVQRLMTPKPV SIATNRSVYFKPSLTPSGEFRKTNQRIDKKCSTGYEKNMTPGQN REQRESGFSYPNFSLPAANGLSSGVGGGGGKMRRERHAFVASKP LEEEEMEGPVLPKISLPITSSSLPTFNFSSPEITTSSPSPINSS QALTNKVQMTSPSSTGSPMFKFSSPIVKSTEANVLPPSSIGFTF SVPVAKTAELSGSSSTLEPIISSSAHHVTTVNSTNCKKTPPEDC EGPFRPAEILKEGSVLDILKSPGFASPKIDSVAAQPTATSPVVY TRPAISSFSSSGIGFGESLKAGSSWQCDTCLLQNKVTDNKCIAC QAAKLSFRDTAKQTGIETPNKSGKTTLSASGTGFGDKFKPVIGT WDCDTCLVQNKPEAIKCVACETPKPGTCVKRALTLTVVSESAET MTASSSSCTVTTGTLGFGDKFKRFJGSWECSVCCVSNNAEDNKC VSCMSEKPGSSVPTSSSSTVPVSLPSGGSLGLEKFKKPEGIWDC ELCLVQNKADSTKCLACESAKPGTKSGFKGFDTSSSSSNSAASS SFKFGVSSSSSGPSQTLTSTGNFKFGDQGGFKIGVSSDSGYINP MSEGF*FSKHIVGFKFGVSSESKPEEVKKDSKNDNFKFGLSFGL SNPVFLTPFQFGVSNLGQEEKKEELLKSSCAGFRFGTGVINSTR VPANTIVTSENKSSFNLGTIETKSVSVAPLKCQTSEAKKEEMPA TKGGFSFGNVEPASLPSASVFVLGRTEEKQQEPVTSTSLVFGEG KLTMKEPKC\QPVFSFGEFQRQTKDENSSKSTFSFSMTKPSEKE SEQPAKATFAFGAQTNTTADQGAAKPDLSYLNNSSSSSSTPATS AGGG\IFGSSTSSSNPPVATFVFGQSSNPGSSS\AFGNTAESST SQSLLFSQDSKLATTSSTGTAVTPFVFGPGASSNNTTTSGFGFG ATTTSSSAGSSFVFGTGPSAPSASPAFGANQTPTFGQSQGASQP NPPGFGSISSSTALFPTGSQPAPPTFGTVSSSSQPPVFGQQPSQ SAFGSGTTPNSSSAFQFGSSTTNFNFTNNSPSGVFTFGANSSTP AASAQPSGSGGPPFNQSPAAFTVGSNGKNVFSSSGTSFSGRKIK TAVRRRK
6950	2585	411	PRPGSRSGLCRRAGERGAVRAGGLSRRTRAE*IMDELHYQDTDS DVPEQRDSKCKVKWTHEEDEQLRALVRQFGQQDWKFLASHFPNR TDQQCQYRWLRVLNPDLVKGPWTKEEDQKVIELVKKYGTKQWTL IAKHLKGRLGKQCRERWHNHLNPEVKKSCWTEEEDRIICEAHKV LGNRWAEIAKMLPGRTDNAVKNHWNSTIKRKVDTGGFLSESKDC KPPVYLLLELEDKDGLQSAQPTEGQGSLLTNWPSVPPTIKEEEN SEEELAAATTSKEQEPIGTDLDAVRTPEPLEEFPKREDQEGSPP ETSLPYKWVVEAANLLIPAVGSSLSEALDLIESDPDAWCDLSKF DLPEEPSAEDSINNSLVQLQASHQQQVLPPRQPSA\LVPSVTEY RLDGHTISDLSRSSRGELIFISPSTEVGGSGIGTPPSVLKRQRK RRVALSPVTENSTSLSFLDSCNSLTFKSTPVKTLPFSPSQFLNF WNKQDTLELESPSLTSTPVCSQKVVVTTPLHRDKTPLHQKHAAF VTPDQKYSMDNTPHTPTPFKNALEKYGPLKPLPQTPHLEEDLKE VLRSEAGIELIIEDDIRPEKQKRKPGLRRSPIKKVRKSLALDIV DEDDMKLMMSTLPKSLSLPTTAPSNSSSLTLSGIKEDNSLLNQGF LQAKPEKAAVAQKPRSHFTTPAPMSSAWKTVACGGTRDQLFMQE KARQLLGRLKPSHTSRTLILS
6951	1940	239	AGPDDTMKRSLQALYCQLLSFLLILALTEALAFAIQEPSPRESL QVLPSGTPPGTMVTAPHSSTRHTSVVMLTPNFDGPPSQAAAPMA TPTPRAEGHPPT\TPSPPSLRQ*PPPILKAP/SSTGPAPAAMAT TSSKPEGRPRGQAAPTILLTKPPGATSRPTTAPPRTTTRRPPRP PGSSRKGAGNSSRPVPPAPGGHSRSKEGQRGRNPSSTPLGQKRP LGKIFQIYKGNFTGSVEPEPSTLTPRTPLWGYSSSPQPQTVAAT

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			TVPSNTSWAPTTTSLGPAKDKPGLRRAAQGGGSTFTSQGGTPDA TAASGAPVSP/PSCPSAFSAPPPR*PTGWPQP**LLAYCYP\CT SRPLSTSSGVFTAATGPTPAAFDTSVSAPSQGIPQGASTTPQAP THPSRVSESTISGAKEETVA\PSP*PTGCPVLSPQWYPQPQAIS STAWSPPGPGSLGQQGTSPMWPRGTNRSTEPPSA*ARWISFG*S WPSACPSPP\LCPADGVLHEEEEEDRQPGEQPEAYGNNTHHPGT TFQQAC\RGAAPGEIPVPLKPLRTQLSEPRSPANGDYRDTGMVP C
6952	658	304	PESEGESGEMTDRYTIHSQLEHLQSKYIGT\ATPTPPSGSG\CE PTPRLVLLLHGPLRPSQLLRHCGE*EQSASPLQLDGKDASALWT ASRQARGELRLCLTTAVRGTSPSVSPVCQSS
6953	1512	349	NWGKTRALASGKHVPFGKQTNPNKS/VHCDS*G**RRETTQDES FSPHFRGKMGGVV\KLEKELENTEQPVGGNEG*EHEVTGNLNSD PLLELCQCPLCQLDCGSREQLIAHVYQHTAAVVSAKSYM\CPVC GRALSSPGSLGRHLLIHSEDQRSNCAVCGARFTSHATFNSEKLF EVLNMESLPTVHNEGPSSAEGKDIAFSPFVYPAGILLVCNNCAA YRKLLEAQTPSVRKWALRRQNEPLEVRLQRLERERTAKKSRRDN ETPEEREVRRMRDREAKRLQRMQETDEQRARRLQRDREAMRLKR AIETPEKRQARLIREREAKRLKRRLEKMDMMLRAQFGQDPSAMA ALAAEMNFFQLPVSGVELDSQLLGKMAFEEQNSSSLH
6954	819	1	PPPPFIIPSHPREAGT*AG*KRSGDSECSPPVEQ*A*TRAAAQN *PQR*RWTEGNSPQASAVATPGQGASPAAPRCTP*PSRRHRRLP PGARPPAG*AAPAPTKPWLAGPASAPQPGAAPLSPPAPPLIRTR *CAGAAARGRPRRDRSPRPRTPGGCSWSEPRTPPAVSASAQTPS DAG*AGGR*GQRQRPSTGR*PPGVGGAGRSHRREGTIPGNPHPR AS*RAGWQR*PGP/REWGL*EPQGEEMSGPGGPGGAFFNQVGSS VMQAMSTGI
6955	1968	782	PPGRRQVRAQVAGAPVGHWGTRARQVKTGGRRRARRTMPFLGQD WRSPGWSWIKTEDGWKRCESCSQKLERENNHCNISHSIILNSED GEIFNNEEHEYASKKRKKDHFRNDTNTQSFYREKWIYVHKESTK ERHGYCTLGEAFNRLDFSSAIQDIRRFNYVVKLLQLIAKSQLTS LSGVAQKNYFNILDKIVQKVLDDHHNPRLIKDLLQDLSSTLCIL /N*RSREVCISGKHQYLDLPIRNYSRLATTATGSSDD*ASE\NG LTLSDLPLHMLNNILYRFSDGWDIITLGQVTPTLYMLSEDRQLW KKLCQYHPAEKQFCRHLILSEKGHIEWKLMYFALQKHYPAKEQY GDTLHFCRHCSILFWKDSGHPCTAADPDSCFTPVSPQHFIDLFK F
6956	8605	3839	QTSTSIFASPTSPPVLGESVLQDNSPDLNNGSDAEQEEMETQSS DFPPSLTQPAPDQSSTIQLHPATSPAVSPTTSPAVSLVVSPAAS PEISPEVCPAASTVVSPAVFSVVSPASSAVLPAVSLEVPLTASV TSPKASPVTSPAAAFPTASPANKDVSSFLETTADVEEITGEGLT ASGSGDVMRRRIATPEEVRLPLQHGWRREVRIKKGSHRWQGETW YYGPCGKRMKQFPEVIKYLSRNVVHSVRREHFSFSPRMPVGDFF EERDTPEGLQWVQLSAEEIPSRIQAITGKRGRPRNTEKARTKEV PKVKRGRGRPPKVKITELLNKTDNRPLKKLEAQETLNEEDKAKI AKSKKKMRQKVQRGECQTTIQGQARNKRKQETKSLKQKEAKKKS KAEKEKGKTKQEKLKEKVKREKKEKVKMKEKEEVTKAKPACKAD KTLATQRRLEERQRQQMILEEMKKPTEDMCLTDHQPLPDFSRVP GLTLPSGAFSDCLTIVEFLHSFGKVLGFDPAKDVPSLGVLQEGL LCQGDSLGEVQDLLVRLLKAALHDPGFPSYCQSLKILGEKVSEI PLTRDNVSEILRCFLMAYGVEPALCDRLRTQPFQAQPPQQKAAV LAFLVHELNGSTLIINEIDKTLESMSSYRKNKWIVEGRLRRLKT VLAKRTGRSEVEMEGPEECLGRRRSSRIMEVTSGMEEEEEEESI AAVPGRRGRRDGEVDATASSIPELERQIEKLSKRQLFFRKKLLH SSQMLRAVSLGQDRYRRRYWVLPYLAGIFVEGTEGNLVPEEVIK KETDSLKVAAHASLNPALFSMKMELAGSNTTASSPARARGRPRK

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			TKPGSMQPRHLKSPVRGQDSEQPQACLQPEAQLHAPAQPQPQLQ LQLQSHKGFLEQEGSPLSLGQSQHDLSQSAFLSWLSQTQSHSSL LSSSVLTPDSSPGKLDPAPSQPPEEPEPDEAESSPDPQALWFNI SAQMPCNAAPTPPPAVSEDQPTPSPQQLASSKPMNRPSAANPCS PVQFSSTPLAGLAPKRRAGDPGEMPQSPTGLGQPKRRGRPPSKF FKQMEQRYLTQLTAQPVPPEMCSGWWWIRDPEMLDAMLKALHPR GIREKALHKHLNKHRDFLQEVCLRPSADPIFEPRCLPAFQEGIM SWSPKEKTYETDLAVLQWVEELEQRVIMSDLQIRGWTCPSPDST REDLAYCEHLSDSQEDITWRGRGREGLAPQRKTTNPLDLAVMRL AALEQNVERRYLREPLWPTHEVVLEKALLSTPNGAPEGTTTEIS YEITPRIRVWRQTLERCRSAAQVCLCLGQLERSIAWEKSVNKVT CLVCRKGDNDEFLLLCDGCDRGCHIYCHRPKMEAVPEGDWFCTV CLAQQVEGEFTQKPGFPKRGQXRKSGYSLNFSEGDGRRRRVLLR GRESPAAGPRYSEEGLSPSKRRRLSMRNHHSDLTFCEIILMEME SHDAAWPFLEPVNPRLVSGYRRIIKNPMDFSTMRERLLRGGYTS SEEFAADALLVFDNCQTFNEDDSEVGKAGHIMRRFFE\SRWEEF YQGKQGCSVRQGRWGVTLWHLPPTFQTKTCHFHLLMLPWVQTQV RYNPDF
6957	82	3514	ELIVAMPEPTKKEENEVPAPAPPPEEPSKEKEAGTTPAKDWTLV ETPPGEEQAKQNANSQLSILFIEKPQGGTVKVGEDITFIAKVKA EDLSEKPTINGSRKWMDLASKAGKHLQLKETFERHSRVYTFEMQ IIKAKDNFAGNYRCEVTYKDKFDSCSFDLEVHESTGTTPNIDIR SAFKRSGEGQEDAGELDFSGLLKRREVKQQEEEPQVDVWELLKN TKPSEYEKIAFQYESPTCSGMLKRLKRSIREEKKSAAFAKILDP VYQVDKGGRVRFVVELADPKLEVKWNKNGQELRPSTKYIFEDTR CQSILNIDNCQMTDDSEYYVTAGDEKCSTELLVREPPIMVTKQL EDTTDYCGERVELECEVSEDDAQVKWFKNGEEIILVQTRYRIRV EGKKHILIIEGATKADAADYSVMTTGGQSSAKLSVDLKPLKILT PLTDQTVNLGKEICLKCEISENIPGKWTKNGLPVQESDRLKVVH KGRIHKLVIDHALTEDEGDYVFAPDAYNVTLPAKVHVIDPPKII LDGLDADNTVTVIAGNKLRLEIPISGEPPPKAMWSRGDKAIMEG SGRIRTESYPDSSTLVIDIAERDDSGVYHINLKNEAGEAHASIK VKVVDFPDPPVAPTVTEVGDDWCIMNWEPPAYDGGSPILGYFIE RKKKQSSRWMRLNFDLCKETTFEPKKMIEGVAYEVRIFAVNA\I GISKPSMPSRPFVPLAVTSPPTLLTVDSVTDTTVTMRWRPPDHI GAAGLDGYVLEYCFEGSTSAKQSDENGEAAYDLPAEDWIVANKD LIDKTKFTITGLPTDAKIFVRVKAVNAAGASEPKYYSQPILVKE IIEPPKIHSPKHLKQTYIRRVGDRVILVIPFQGKPRPELTWKKD GAEIDKNQINIRNSETDTIIFIRKAERSHSGKYDLQVKVDKFVE TASIDIRIIDRPGPPQIVKIEDVWGRNVALTWTPPKDDGNAAIT GYTIQKADKKSMEWLRVIEHIIEPVFHTELVIGNEYYFRVFSEN MCGLSEDATMTKESAVIARDGKIYKNPVYEDFDFSEAPMFTQPL VNRLCHSGYMATLNCSVRGNPKPKITWMKNKVAIVDDPRYRMFS NQGVCTLEIRKPSPYDGGTYCCKAVNDLGTVEIECKLEVKVIAQ
6958	274	1663	PRTSRVKTEGSQGSSAMDFSVKVDIEKEVTCPICLELLTEPLSL DCGHSFCQACITAKIKESVIISRGESSCPVCQTRFQPGNLRPNR HLANIVERVKEVKMSPQEGQKRDVCEHHGKKLQIFCKEDGKVIC WVCELSQEHQGHQTFRINEVVKECQEKLQVALQRLIKENQEAEK LEDDIRQERTAWKNYIQIERQKILKGFNEMRVILDNEEQRELQK LEEGEVNVLDNLAAATDQLVQQRQDASTLISDLQRRLRGSSVEM LQDVIDVMKRSESWTLKKPKSVSKKLKSVFRVPDLSGMLQVLKE LTDVQYYWVDVMLNPGSATSNVAISVDQRQVKTVRTCTFKNSNP CDFSAFGVFGCQYFSSGKYYWEVDVSGKIAWILGVHSXISSLNK RKSSGFAFDPSVNYSKVYSRYRPQYCYWVIGLQNTCEYNAFEDS SSSDPKVLTLFMAV\LPVVLGFS
6959	1	1469	SLVHVVEFGRGIEDFPYLFFQLTHCQQRICSVTQAGVQWCDHSS

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			LQPQTPGLNQSSHLSLLSSRDYRMLSSFNEWFWQDRFWLPPNVT WTELEDRDGRVYPHPQDLLAALPLALVLLAMRLAFERFIGLPLS RWLGVRDQTRRQVKPNATLEKHFLTEGHRPKEPQLSLLAAQCGL TLQQTQRWFRRRRNQDRPQLTKKFCEASWRFLFYLSSFVGGLSV LYHESWLWAPVMCWDRYPNQLTLSCPAADSEA\SLYWWYLLELG FYLSLLIRLPFDVKRKGGGPSSIKPRPHYDPPSTA\DFKEQVIH HFVAVILMTFSYSANLLRIGSLVLLLHDSSDYLLEACKMVNYMQ YQQVCDALFLIFSFVFFYTRLVLFPTQILYTTYYESISNRGPFF GYYFFNGLLMLLQLLHVFWSCLILRMLYSFMKKGQMEKDIRSDV EESDSSEEAAAAQEPLQLKNGTAGGPRPAPTDGPRSRVAGRLTK RHTTAT
6960	387	2068	AKWAREKEMQEF\TRSFF\RGRPDLSTLTHSIVRRRYLAHSGRS HLEPEEKQALKRLVEEEPLKMQVDEAASREDKLDLTKKGKRPPT PCSDPERKRFRFNSESESGSEASSPDYFGPPAKNGVASRSHTEP KEENPRRA\SKAVEESSDEERQRDLPAQRGEESSEEEEKGYKGK TRKKPVVKKQAPGKASVSRKQAREESEESEAEPVQRTAKKVEGN KGTKSLKESEQESEEEILAQKKEQREEEVEEEEKEEDEEKGDWK PRTRSNGRRKSAREERSCKQKSQAKRLLGDSDSEEEQKEAASSG DDSGRDREPPVQRKSEDRTQLKGGKRLSGSSEDEEDSGKGEPTA KGSRKMARLGSTSGEESDLEREVSDSEAGGGPQGERKNRSSKKS SRKGRTRSSSSSSDGSPEAKGGKAGSGRRGEDHPAVMRLKRYIR ACGAHRNYKKLLGSCCSHKERLSILRAELEALGMKGTPSLGKCR ALKEQREEAAEVASLDVANIISGSGRPRRRTAWNPLGEAAPPGE LYRRTLDSDEERPRPAPPDWSHMRGIISSDGESN
6961	340	1646	RPWSSPTMKPNFSLRLRIFNLNCWGIPYLSKHRADRMRRLGDFL NQESPDLALLEEVWSEQDFQYLRQKLSPTYPAAHHFRSGIIGSG LCVFSKHPIQELTQHIYTLNGYPYMIHHGDWFSGKAVGLLVLHL SGMVLNAYVTHLHAEYNRQKDIYLAHRVAQAWELAQFIHHTSKK ADVVLLCGDLNMHPEDLGCCLLKEWTGLHDAYLETRDFKGSEEG NTMVPKNCYVSQQELKPFPFGVRIDYVLYKAVSGFYISCKSFET TTGFDPHRGTPLSDHEALMATLFVRHSPPQQNPSSTHGP\AERS PL/MCVCLKEALDGSLGLGMA\QARWWA\TFA\SYVIGLGL\LL LALLCVLAAGGGAGEAAILLWTPSVGLVLWAGAFYLFHVQEVNG LYRAQAELQHVLGRAREAQDLGPEPQLYALL\LGCQEGDRTKEQ
6962	340	1646	RPWSSPTMKPNFSLRLRIFNLNCWGIPYLSKHRADRMRRLGDFL NQESPDLALLEEVWSEQDFQYLRQKLSPTYPAAHHFRSGIIGSG LCVFSKHPIQELTQHIYTLNGYPYMIHHGDWFSGKAVGLLVLHL SGMVLNAYVTHLHAEYNRQKDIYLAHRVAQAWELAQFIHHTSKK ADVVLLCGDLNMHPEDLGCCLLKEWTGLHDAYLETRDFKGSEEG NTMVPKNCYVSQQELKPFPFGVRIDYVLYKAVSGFYISCKSFET TTGFDPHRGTPLSDHEALMATLFVRHSPPQQNPSSTHGP\AERS PL/MCVCLKEALDGSLGLGMA\QARWWA\TFA\SYVIGLGL\LL LALLCVLAAGGGAGEAAILLWTPSVGLVLWAGAFYLFHVQEVNG LYRAQAELQHVLGRAREAQDLGPEPQLYALL\LGQQEGDRTKEQ
6963	374	2618	RVTPLILKLLKKPKTAENQKASEENEITQPGGSSAKPGLPCLNF EAVLSPDPALIHSTHSLTNSHAHTGSSDCDISCKGMTERIHSIN LHNFSNSVLETLNEQRNRGHFCDVTVRIHGSMLRAQRCVLAAGS PFFQDKLLLGYSDIEIPSVVSVQSVQKLIDFMYSGVLRVSQSEA LQILTAASILQIKTVIDECTRIVSQNVGDVFPGIQDSGQDTPRG TPESGTSGQSSDTESGYLQSHPQHSVDRIYSALYACSMQNGSGE RSFYSGAVVSHHETALGLPRDHHMEDPSWITRIHERSQQMERYL STTPETTHCRKQPRPVRIQTLVGNIHIKQEMEDDYDYYGQQRVQ ILERNESEECTEDTDQAEGTESEPKGESFDSGVSSSIGTEPDSV EQQFGPGAARDSQAEPTQPEQAAEAPAEGGPQTNQLETGASSPE RSNEVEMDSTVITVSNSSDKSVLQQPSVNTSIGQPLPSTQLYLR QTETLTSNLRMPLTLTSNTQVIGTAGNTYLPALFTTQPAGSGPK

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			PFLFSLPQFLAGQQTQFVTVSQPGLSTFTAQLPAPQPLASSAGH STASGQGEKKPYECTLCNKTFTAKQNYVKHMFVHTGEKPHQCSI CWRSFSLKDYLIK\HMVTHTGVRAYQCSICNKRFTQKSSLNVHM RLHRGEKSYECYICKKKFSHKTLLERHVALHSASNGTPPAGTPP GARAGPPGVVACTEGTTYVCSVCPAKFDQIEQFNDHMRMHVSDG
6964	1	178	SGRPFFFFFSNTDVYFIKKVTNRWTAGSSYKMTRMKSIGKILLL QIFIG\NCSMFVLVI
6965	757	208	NVFIEPRICGFMKTSAHPGQKHPDFSMGLLFPLLAALEVCSCGS SGSLGYNLPQNH\GLLGRNTLVLLGQMRRISPFLCLKDRSDFRF PQEKVEVSQLQKA\QAMSFLYDVLQQVFNFSHKALL\CCMEHDL PGPTPHFTSSAAGTPGDLLGAGDGRRRSWGQWVIEGSTLALRRY FQESISTLE
6966	820	1867	IITALGVRGMPGCPCFGCGMAGPRLLFLTALALELLGRAGGSQP ALRSRGTATACRLDNKESESWGALLSGERLDTWICSLLGSLMVG LSGVFPLLVIPLEMGTMLRSEAGAWRLKQLLSFALGGLLGNVFL HLLPEAWAYTCSASPGGEGQSLQQQQLGLWVIAGILTFLALEK /HVPGQQGGGDQPGPQQRPHCCCRRAQWRPLSGPAGCRARPRCR GP\DIKVSGYLNLLANTIDNFTHGLAVAASFLVSKKIGLLTTMA ILLIEIPHEVGDFAILLRAGFDRWSAAKLQLSTALGGLLGAGFA ICTQSPKGVEETAAWVLPFTSGGFLYIALVNVLPDLLEEEDPW
6967	162	633	GFLPFKYWILDLSASSRMETDCNPMELSSMSGFEEGSELNGFEG TDMKDMRLEAEAVVNDVLFAVNNMFVSKSLRCADDVAYINVETK ERNRYCLELTEAGLKVVGYAFDQVDDHLQTPYHETVYSLLDTL\ SPAYREAFGKR\LLQRLFALKRDGQS
6968	1	2265	RGGGGGRGGPGARERERPGEPERTMEAAAGGRGCFQPHPGLQKT LEQFHLSSMSSLGGPAAFSARWAQEAYKKESAKEAGAAAVPAPV PAATEPPPVLHLPAIQPPPPVLPGPFFMPSDRSTERCETVLEGE TISCFVVGGEKRLCLPQILNSVLRDFSLQQINAVCDELHIYCSR CTADQLEILKVMGILPFSAPSCGLITKTDAERLCNALLYGGAYP PPCKKELAASLALGLELSERSVRVYHE\CFGKCKGL\LVPELYS SPSAACIQCLD\CRLMYPPHKFVVHSHKALENRTCHWGF\DSA\ NWRAYILLSQDYTGKEEQARLGR\CLDDVKEKFDYGNKYKRRVP RVSSEPPASIRPKTDDTSSQSPAPSEKDKPSSWLRTLAGSSNKS LGCVHPRQRLSAFRPWSPAVSASEKELSPHLPALIRDSFYSYKS FETAVAPNVALAPPAQQKVVSSPPCAAAVSRAPEPLATCTQPRK RKLTVDTPGAPETLAPVAAPEEDKDSEAEVEVESREEFTSSLSS LSSPSFTSSSSAKDLGSPGARALPSAVPDAAAPADAPSGLEAEL EHLRQALEGGLDTKEAKEKFLHEVVKMRVKQEEKLSAALQAKRS LHQELEFLRVAKKEKLREATEAKRNLRKEIERLRAENEKKMKEA NESRLRLKRELEQARQARVCDKGCEAGRLRAKYSAQIEDLQVKL QHAEADREQLRADLLRERAREHLEK\VVK\ELQEQLWPRARPE AAGSEG\AAELEP
6969	1855	118	AGTMHGRLKVKTSEEQAEAKRLEREQKLKLYQSATQAVFQKRQA GELDESVLELTSQILGANPDFATLWNCRREVLQQLETQKSPEEL AALVKAELGFLESCLRVNPKSYGTWHHRCWLLGRLPEPNWTREL ELCARFLEVDERNFHCWDYRRFVATQAAVPPAEELAFTDSLITR NFSNYSSWHYRSCLLPQLHPQPDSGPQGRLPEDVLLKELELVQN AFFTDPNDQSAWFYHRWLLGRADPQDALRCLHVSRDEACLTVSF SRPLLVGSRMEILLLMVDDSPLIVEWRTPDGRNRPSHVWLCDLP AASLNDQLPQHTFRVIWTAGDVQKECVLLKGRQEGWCRDSTTDE QLFRCELSVEKSTVLQSELESCKELQELEPENKWCL\LTIILLM RALDPLLYEKETLQYFQTLK\AWDPKRATY\LDDLRSKFLLENS VLKMEYAEVRVLHLAHKDLTVLCHLEQLLLVTHLDLSHNRLRTL PPALAALRCLEDPPPRT\VLQASDNAIESLDGVTNLPRLQELLL CNNRLQQPAVLQPLASCPRLVLLNLQGNPLCQAVGILEQLAELL PSVSSVLT

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6970	2	1528	SFPPLLSSPSAVGEGKVAVAAPCPGRSECARAKMAYIQLEPLNE GFLSRISGLLLCRWTCRHCCQKCYESSCCQSSEDEVEILGPFPA QTPPWLMASRSSDKDGDSVHTASEVPLTPRTNSPDGRRSSSDTS KSTYSLTRRISSLESRRPSSPLIDIKPIEFGVLSAKKEPIQPSV LRRTYNPDDYFRKFEPHLYSLDSNSDDVDSLTDEEILSKYQLGM LHFSTQYDLLHNHLTVRVIEARDLPPPISHDGSRQDMAHSNPYV KICLLPDQKNSKQTGVKRKTQKPVFEERYTFEIPFLEAQRRTLL LTVVDFDKFSRHCVIGKVSVPLCEVDLVKGGHWWKALIPSSQNE VELGELLLSLNYLPSAGRLNVDVIRAKQLLQTDVSQGSDPFVKI QLVHGLKLVKTKKTSFLRGTIDPFYNESFSFKVPQEELENASLV FTVFGHNMKSSNDFIGRIVIG\QYSSGP\SEPNHWRRMLNTHRT AVEQWHSLRSRAECDRVSPASLEVT
6971	37	3702	ACFYVPGSRSFKLIPRHGLVNMGRSGKLPSGVSAKLKRWKKGHS SDSNPAICRHRQAARSRFFSRPSGRSDLTVDAVKLHNELQSGSL RLGKSEAPETPMEEEAELVLTEKSSGTFLSGLSDCTNVTFSKVQ RFWESNSAAHKEICAVLAAVTEVIRSQGGKETETEYFAALIRKA AQHGVCSVLKGSEFMFEKAPAHHPAAISTAKFCIQEIEKSGGSK EATTTLHMLTLLKDLLPCFPEGLVKSCSETLLRVMTLSHVLVTA CAMQAFHSLFHARPGLSTLSAELNAQIITALYDYVPSENDLQPL LAWLKVMEKAHINLVRLQWDLGLGHLPRFFGTAVTCLLSPHSQV LTAATQSLKEILKECVAPHMADIGSVTSSASGPAQSVAKMFRAV EEGLTYKFHAAWSSVLQLLCVFFEACGRQAHPVMRKCLQSLCDL RLSPHFPHTAALDQAVGAAVTSMGPEVVLQAVPLEIDGSEETLD FPRSWLLPVIRDHVQETRLGFFTTYFLPLANTLKSKAMDLAQAG STVESKIYDTLQWQMWTLLPGFCTRPTDVAISFKGLARTLGMAI SERPDLRVTVCQALRTLITKGCQAEADRAEVSRFAKNFLPILFN LYGQPVAAGDTPAPRRAVLETIRTYLTITDTQLVNSLLEKASEK VLDPASSDFTRLSVLDLVVALAPCADEAAISKLYSTIRPYLESK AHGVQKKAYRVLEEVCASPQGPGALFVQSHLEDLKKTLLDSLRS TSSPAKRPRLKCLLHIVRKLSAEHKEFITALIPEVILCTKEVSV GARKNAFALLVEMGHAFLRFGSNQEEALQCYLVLIYPGLVGAVT MVSCSILALTHLLFEFKGLMGTSTVEQLLENVCLLLASRTRDVV KSALGFIKVAVTVMDVAHLAKHVQLVMEAIGKLSDDMRRHFRMK LRNLFT\KFIPK\FGILTWGKKAVGPKEYHRVLVNIRKAEARAK RHRALSQAAVEEEEEEEEEEPAQGKGDSIEEILADSEDEEDNE EEERSRGKEQRKLARQRSRAWLKEGGGDEPLNFLDPKVAQRVLA TQFGPGRGRKKDHSFKVSADGRLIIREEADGNKMEEEEGAKGED EEMADPMEDVIIRNKKHQKLKHQKEAEEEELEIPPQYQAGGSGI HRPVAKKAMPGAEYKAKKAKGDVKKKGRPDPYAYIPLNRSKLNR RKKMKLQGQFKGLVKAAQRGSQVGHKNRRKDRRP
6972	2179	973	PGGAILLPLWRRTRPREATVPRGAAQRGRARSAEGRIPSSQSPS PAEAGGATRSPPPRPPRPARPPGPSAPPLLRSDAGPGATVSAAA AAATERARRGATMGAQLSTLGHMVLFPVWFLYSLLMKLFQRSTP AITLESPDIKYPLRLIDREIISHDTRRFRFALPSPQHILGLPVG QHIYLSARIDGNLVVRPYTPISSDDDKGFVDLVIKVYFKDTHPK FPAGGKMSQYLESMQIGDTIEFRGPSGLLVYQGKGKFAIRPDKK SNPIIRTVKSVGMIAGGTGITPMLQVIRAIMKDPDDHTVCHLLF ANQTEKDILLRPELEELRNKHSARFKLWYTLDRAPEAWDYGQG\ FVNEEMIRDHLPPPE\EEPLVLMCGPPPMIQYACLPNL\DHVGH PTERCFVF
6973	1	1964	LQPRCAHRGLRAQKCGRPAPGVDAMVLCPVIGKLLHKRVVLASA SPRRQEILSNAGLRFEVVPSKFKEKLDKASFATPYGYAMETAKQ KALEVANRLYQKDLRAPDVVIGADTIVTVGGLILEKPVDKQDAY RMLSRFE/SGREHSVFTGVAIVHCSSKDHQLDTRVSEFYEETKV KFSELSEELLWEYVHSGEPMDKAGGYGIQALGGMLVESVHGDFL NVVGFPLNHFCKQLVKLYYPPRPEDLRRSVKHDSIPAADTFEDL

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			SDVEGGGSEPTQRDAGSRDEKAEAGEAGQATAEAECHRTRETLP PFPTRLLELIEGFMLSKGLLTACKLKVFDLLKDEAPQKAADIAS KVDASACGMERLLDICAAMGLLEKTEQGYSNTETANVYLASDGE YSLHGFIMHNNDLTWNLFTYLEFAIREGTNQHHRALGKKAEDLF QDAYYQSPETRLRFMRAMHGMTKLTACQVATAFNLSRFSSACDV GGCTGALARELAREYPRMQVTVFDLPDIIELAAHFQPPGPQAVQ IHFAAGDFFRDPLPSAELYVLCRILHDWPDDKVHKLLSRVAESC KPGAGLLLVETLLDEEKRVAQRALMQSLNMLVQTEGKERSLGEY QCLLELHGFHQVQVVHLGGVLDAIL\PPKWPPEAQAACSL
6974	3082	2172	RSCAAFASFASRPPLELFAPPGSHRSPPGRGVATSAQCALSVRK LLAARPGLGTKYQATMVYKTLFALCILTAGWRVQSLPTSAPLSV SLPTNIVPPTTIWTSSPQNTDADTASFSNGTHNNSVLPVTASAP TSLLPKNISIESREEEITSPGSNWEGTNTDPSPSGFSSTSGGVH LTTTLEEHSLGTPEAGVAATLSQSAAEPPTLISPQAPASSPSSL STSPPEVFSASVTTNHSSTVTSTQPTGAPTAPESPTEESSSDHT PTSHATAEPVPQEKTPPTTVSGKVMCELIDMET\PPPFPG
6975	2	500	RPRPTVHCCKWALKLETAMETLINVFHAHSGKEGDKYKLSKKEL KELLQTELSGFLDVKELML*ATEALKTFEEA*KSPIIQCSSSRS SLPPAPQPPPYL*LSAVPFPIHLPLPLLPPQAQKDVDAVDKVMK ELDENGDGEVDFQEYVVLVAALTVACNNFFWENS
6976	1216	970	GCQL*VAYGTTENSPVTFAHPPEDTVEQKAESVGRIMPHTEARI MNMEAGTLAKLNTPGELCIRGYCVMLGYWGEPQKTEEAVDQDKW YWTGDVATMNEQGFCKIVGRSKDMIIRGGENIYPAELEDFFHTH PKVQEVQVVGVKDDRMGEEICACIRLKDGEETTVEEIKAFCKGK ISHFKIPKYIVFVTNYPLTISGKIQKFKLREQMERHLNL*IKQQ ACPGRLA
6977	1298	588	SLFINTNLLSNQIRKTSFGMCSEPISDNTEDQKGKLKTPDFA*R ANKKSKHHVNGNRTVEPFPEGTQMAVFGMGCFWGAERKFWVLKG VYSTQVGFAGGYTSNPTYKEVCSEKTGHAEVVRVVYQPEHMSFE ELLKVFWENHDPTQGMRQGNDHGTQYRSAIYPTSAKQMEAALSS KENYQKVLSEHGFGPITTDIREGQTFYYAEDYHQQYLSKNPNGY CGLGGTGVSCPVGIKK
6978	3	242	SFPFRDSRRCGCCKGSSLRETAVAMVKLSKEAKQRLQQLFKGSQ FAIRWGFIPLVIYLGFKRGADPGMPEPTVLSLLWG
6979	3917	1146	DEARVRGEAVAAAILSRCRHWSGPPPFPPSPPDRKGLRGTEPWE AGPGSGATPGARAMDVRRLKVNELREELQRRGLDTRGLKTELAE RLQAALEAEEPDDERELDADDEPGRPGHINEEVETEGGSELEGT AQPPPPGLQPHAEPGGYSGPDGHYAMDNITRQNQFYDTQVIKQE NESGYERRPLEMEQQQAYRPEMKTEMKQGAPTSFLPPEASQLKP DRQQFQSRKRPYEENRGRGYFEHREDRRGRSPQPPAEEDEDDFD DTLVAIDTYNCDLHFKVARDRSSGYPLTIEGFAYLWSGARASYG VRRGRVCFEMKINEEISVKHLPSTEPDPHVVRIGWSLDSCSTQL GEEPFSYGYGGTGKKSTNSRFENYGDKFAENDVIGCFADFECGN DVELSFTKNGKWMGIAFRIQKEALGGQALYPHVLVKNCAVEFNF GQRAEPYCSVLPGFTFIQHLPLSERIRGTVGPKSKAECEILMMV GLPAAGKTTWAIKHAASNPSKKYNILGTNAIMDKHRVMGLRRQR NYAGRWDVLIQQATQCLNRLIQIAARKKRNYILDQTNVYGSAQR RKMRPFEGFQRKAIVICPTDEDLKDRTIKRTDEEGKDVPDHAVL EMKANFTLPDVGDFLDEVLFIELQREEADKLVRQYNEEGRKAGP PPEKRFDNRGGGGFRGRGGGGGFQRYENRGPFGGNRGGFQNRGG GSGGGGNYRGGFNRSGGGGYSQNRWGNNNRDNNNSNNRGSYNRA PQQQPPPQQQPPPPQPPPQQPPPPPSYSPARNPPGASTYNKNSNI PGSSANTSTPTVSSYSPPQSFGFFPSTFQPSYSQPPYNQGGYSQ GYTAPPPPPPPPPAYNYGSYGGYNPAPYTPPPPPTAQTYPQPSY NQYQQYAQQWNQYYQNQGQWPPYYGNYDYGSYSGNTQGGTSTQ
6980	1	420	GTRGRKTGRVAAPSTRRRTGNMQKLQTRSPAMSLSDPGLGYHPT

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			CWTLRWPPLCSLHALHVFHCLFSSRLGTPVSPRLAMDPNCSCEA GGSCACAGSCKCKKCKCTSCKKSCCSCCPLGCAKCAQGCICKGA SEKCSCCA
6981	10	1054	PGRGFRRASLRPAFAARGVFQGGLGQAKQARTRACAALPTPHPS APRLLEPQGVFSLFPPPPGPWPNMILTKAQYDEIAQCLVSVPPT RQSLRKLKQRFPSQSQATLLSIFSQEYQKHIKRTHAKHHTSEAI ESYYQRYLNGVVKNGAAPVLLDLANEVDYAPSLMARLILERFLQ EHEETPPSKSIINSMLRDPSQIPDGVLANQVYQCIVNDCCYGPL VDCIKHAIGHEHEVLLRDLLLEKNLSFLDEDQLRAKGYDKTPDF ILQVPVAVEGHIIHWIESKASFGDECSHHAYLHDQFWSYWNRFG PGLVIYWYGFIQELDCNRERGILLKACFPTNIVTLCHSIA
6982	153	1285	FPQQDCSAPAAPGLAGSEPRRLRAYRRRRQRARGLKRVAWLAPP PSLLQGLQGWAQAPVDGTLGPEDSRASSPMIQNSRPSLLOPQDV GDTVETLMLHPVIKAFLCGSISGTCSTLLFQPLDLLKTRLQTLQ PSDHGSRRVGMLAVLLKVVRTESLLGLWKGMSPSIVRCVPGVGI YFGTLYSLKQYFLRGHPPTALESVMLGVGSRSVAGVCMSPITVI KTRYESGKYGYESIYAALRSIYHSEGHRGLFSGLTATLLRDAPP SGIYLMFYNQTKNIVPHDQVDATLIPITNFSCGIFAGILASLVT QPADVIKTHMQLYPLKFQWIGQAVTLIFKDYGLRGFFQGGIPRA LRRTLMAAMAWTVYEEMMAKMGLKS
6983	82	773	EMSFLQDPSFFTMGMWSIGAGALGAAALALLLANTDVFLSKPQK AALEYLEDIDLKTLEKEPRTFKAKELWEKNGAVIMAVRRPGCFL CREEAADLSSLKSMLDQLGVPLYAVVKEHIRTEVKDFQPYFKGE IFLDEKKKFYGPQRRKMMFMGFIRLGVWYNFFRAWNGGFSGNLE GEGFILGGVFVVGSGKQGILLEHREKEFGDKVNLLSVLEAAKMI KPQTLASEKK
6984	1845	1282	GGRSAYSLPAGSLPRVPATAAAKMASGVQVADEVCRIFYDMKVR KCSTPEEIKKRKKAVIFCLSADKKCIIVEEGKEILVGDVGVTIT DPFKHFVGMLPEKDCRYALYDASFETKESRKEELMFFLWAPELA PLKSKMIYASSKDAIKKKFQGIKHECQANGPEDLNRACIAEKLG GSLIVAFEGCPV
6985	1887	1324	RRTAGIYPCFPKPGRTRHALCSVVLLLLTGQLAFDDFQESCAMM WQKYAGSRRSMPLGARILFHGVFYAGGFAIVYYLIQKFHSRALY YKLAVEQLQSHPEAQEALGPPLNIHYLKLIDRENFVDIVDAKLK IPVSGSKSEGLLYVHSSRGGPFQRWHLDEVFLELKDGQQIPVFK LSGENGDEVKKE
6986	642	1350	YHLYFKMGDPNSRKKQALNRLRAQLRKKKESLADQFDFKMYIAF VFKEKKKKSALFEVSEVIPVMTNNYEENILKGVRDSSYSLESSL ELLQKDVVQLHAPRYQSMRRDVIGCTQEMDFILWPRNDIEKIVC LLFSRWKESDEPFRPVQAKFEFHHGDYEKQFLHVLSRKDKTGIV VNNPNQSVFLFIDRQHLQTPKNKATIFKLCSICLYLPQEQLTHW AVGTIEDHLRPYMPE
6987	1623	341	LEAAEKASRAFKESQRQTDSKNYETENWSPQKSQRRYDMYNTAC FLGEIEVGLYTIQILQLTPFFHKENELSKKHMVQFLSGKWTIPP DPRNECYLALSKFTSHLKNLQSDLKRCFDFFIDYMVLLKMRYTQ KEIAEIMLSKKVSRCFRKYTELFCHLDPCLLQSKESQLLQEENC RKKLEALRADRFAGLLEYLNPNYKDATTMESIVNEYAFLLQQNS KKPMTNEKQNSILANIILSCLKPNSKLIQPLTTLKKQLREVLQF VGLSHQYPGPYFLACLLFWPENQELDQDSKLIEKYVSSLNRSFR GQYKRMCRSKQASTLFYLGKRKGLNSIVHKAKIEQYFDKAQNTN SLWHSGDVWKKNEVKDLLRRLTGQAEGKLISVEYGTEEKIKIPV ISVYSGPLRSGRNIERVSFYLGFSIEGPPGL
6988	3	689	TQLLRRPAVPVGSAASGIRSGLWSASSGHWCAPAAGRAHAPVPR LVRGLGAASTAAPQDAQTGPQPMPRADCIMRHLPYFCRGQVVRG FGRGSKQLGIPTANFPEQVVDNLPADISTGIYYGWASVGSGDVH KMVVSIGWNPYYKNTKKSMETHIMHTFKEDFYGEILNVAIVGYL

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			RPEKNFDSLESLISAIQGDIEEAKKRLELPEHLKIKEDNFFQVS KSKIMNGH
6989	2	1118	LMPSDRPLSPSTHASAGSHCHAPPTTARRAFPIPPGSKSNMATL KDQLIYNLLKEEQTPQNKITVVGVGAVGMACAISILMKDLADEL ALVDVIEDKLKGEMMDLQHGSLFLRTPKIVSGKDYNVTANSKLV IITAGARQQEGESRLNLVQRNVNIFKFIIPNVVKYSPNCKLLIV SNPVDILTYVAWKISGFPKNRVIGSGCNLDSARFRYLMGERLGV HPLSCHGWVLGEHGDSSVPVWSGMNVAGVSLKTLHPDLGTDKDK EQWKEVHKQVVESAYEVIKLKGYTSWAIGLSVADLAESIMKNLR RVHPVSTMIKGLYGIKDDVFLSVPCILGQNGISDLVKVTLTSEE EARLKKSADTLWGIQKELQF
6990	719	258	THASGMASVVLALRTRTAVTSLLSPTPATALAVRYASKKSGGSS KNLGGKSSGRRQGIKKMEGHYVHAGNIIATQRHFRWHPGAHVGV GKNKCLYALEEGIVRYTKEVYVPHPRNTEAVDLITRLPKGAVLY KTFVHVVPAKPEGTFKLVAML
6991	169	453	RRSSDFHNPGFLSRPVSLRENIHHQVICSTKNKRRNPKKIAYLL SSLLMTNLNPNESTENQPVDAYWAFTLDQEFLTYACVEGTGCLF CGRHVH
6992	944	510	RQAPGCSSLALRCVRQVYCGLVRAPQVQTRPLSSRFVERRGALY RSPMNQENPPPYPGPGPTAPYPPYPPQPMGPGPMGGPYPPPCGY PYQGYPQYGWQGGPQEPPKTTVYVVEDQRRDELGPSTCLTACWT ALCCCCLWDMLT
6993	1	374	QWCVTCPQHNARQGPAVPPGIQAYGAAPPEDLQVDFTEMSKCRG DRVWIKNWNVASLCPLWKGPQTVVLSPPTAVKVEGIPAWIHHSH VKPAARETWEARPSPDNPFRVTLKKTTSPAPVTPGS
6994	346	1100	QWPEKDPVMAASSISSPWGKHVFKAILMVLVALILLHSALACSR RDFAPPGQQKREAPVDVLTQIGRSVRGTLDAWIGPETMHLVSES SSQVLWAISSAISVAFFALSGIAAQLLNALGLAGDYLAQGLKLS PGQVQTFLLWGAGALVVYWLLSLLLGLVLALLGRILWGLKLVIF LAGFVALMRSVPDPSTRALLLLALLILYALLSRLTGSRASGAQL EAKVRGLERQVEELRWRQRRAAKGARSVEEE
6995	144	1346	GSVAVGLSGIMAAQKDLWDAIVIGAGIQGCFTAYHLAKHRKRIL LLEQFFLPHSRGSSHGQSRIIRKAYLEDFYTRMMHECYQIWAQL EHEAGTQLHRQTGLLLLGMKENQELKTIQANLSRQRVEHQCLSS EELKQRFPNIRLPRGEVGLLDNSGGVIYAYKALRALQDAIRQLG GIVRDGEKVVEINPGLLVTVKTTSRSYQAKSLVITAGPWTNQLL RPLGIEMPLQTLRINVCYWREMVPGSYGVSQAFPCFLWLGLCPH HIYGLPTGEYPGLMKVSYHHGNHADPEERDCPTARTDIGDVQIL SSFVRDHLPDLKPEPAVIESCMYTNTPDEQFILDRHPKYDNIVI GAGFSGHGFKLAPVVGKILYELSMKLTPSYDLAPFRISRFPSLG KAHL
6996	543	1942	ETANAEAAARKSAMDWKEVLRRRLATPNTCPNKKKSEQELKDEE MDLFTKYYSEWKGGRKNTNEFYKTIPRFYRLPAENEVLLQKLR EESRAVFLQRKSRELLDNEELQNLWFLLDKHQTPPMIGEEAMIN YENFLKVGEKAGAKCKQFFTAKVPAKLLHTDSYGRISIMQFFNY VMRKVWLHQTRIGLSLYDVAGQGYLRESDLENYILELIPTLPQL DGLEKSFYSFYVCTAVRKFFFFLDPLRTGKIKIQDILACSFLDD LLELRDEELSKESQETNWFSAPSALRVYGQYLNLDKDHNGMLSK EELSRYGTATMTNVFLDRVFQECLTYDGEMDYKTYLDFVLALEN RKEPAALQYIFKLLDIENKGYLNVFSLNYFFRAIQELMKIHGQD PVSFQDVKDEIFDMVKPKDPLKISLQDLINSNQGDTVTTILIDL NGFWTYENREALVANDSENSADLDDT
6997	370	2104	AMELTIFILRLAIYILTFPLYLLNFLGLWSWICKKWFPYFLVRF TVIYNEQMASKKRELFSNLQEFAGPSGKLSLLEVGCGTGANFKF YPPGCRVTCIDPNPNFEKFLIKSIAENRHLQFERFVVAAGENMH

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			QVADGSVDVVVCTLVLCSVKNQERILREVCRVLRPGGAFYFMEH VAAECSTWNYFWQQVLDPAWHLLFDGCNLTRESWKALERASFSK LKLQHIQAPLSWELVRPHIYGYAVK
6998	2	616	FVSRALLRVRSRRHPAEERAAPGRPEDAPIECPGATNCPEPLWC SHLPVPYAPPTMESRGKSASSPKPDTKVPQVTTEAKVPPAADGK APLTKPSKKEAPAEKQQPPAAPTTAPAKKTSAKADPALLNNHSN LKPAPTVPSSPDATPEPKGPGDGAEEDEAASGGPGGRGPWSCEN FNPLLVAGGVAVAAIALILGVAFLVRKK
6999	14	1591	GRAGACSRRDTAMSIEIESSDVIRLIMQYLKENSLHRALATLQE ETTVSLNTVDSIESFVADINSGHWDTVLQAIQSLKLPDKTLIDL YEQVVLELIELRELGAARSLLRQTDPMIMLKQTQPERYIHLENL LARSYFDPREAYPDGSSKEKRRAAIAQALAGEVSVVPFSRLMAL LGQALKWQQHQGLLPPGMTIDLFRGKAAVKDVEEEKFPTQLSRH IKFGQKSHVECARFSPDGQYLVTGSVDGFIEVWNFTTGKIRKDL KYQAQDNFMMMDDAVLCMCFSRDTEMLATGAQDGKIKVWKIQSG QCLRRFERAHSKGVTCLSFSKDSSQILSASFDQTIRIHGLKSGK TLKEFRGHSSFVNEATFTQDGHYIISASSDGTVKIWNMKTTECS NTFKSLGSTAGTDITVNSVILLPKNPEHFVVCNRSNTVVIMNMQ GQIVRSFSSGKREGGDFVCCALSPRGEWIYCVGEDFVLYCFSTV TGKLERTLTVHEKDVIGIAHHPHQNLIATYSEDGLLKLWKP
7000	2	827	GPGVVFLELMESEGPPESERSEFFSQREEENEEEEAQEPEETGP KNPLLQPALTGDVEGLQKIFEDPENPHHEQAMQLLLEEDIVGRN LLYAACMAGQSDVIRALAKYGVNLNEKTTRGYTLLHCAAAWGRL ETLKALVELDVDIEALNFREERARDVAARYSQTECVEFLDWADA RLTLKKYIAKVSLAVTDTEKGSGKLLKEDKNTILSACRAKNEWL ETHTEASINELFEQRQQLEDIVTPIFTKMTTPCQVKSAKSVTSH DQKRSQDDTSN
7001	2056	844	RRCLIIAFLKGCFIFIYPIFIFETEFLSCCPGWSAVAQSRLIAN FASQVQAIFILPKDSQVGPDVKSEAAPKRALYESVFGSGEICGP TSPKRLCIRPSEPVDAVVVVSVKHDPLPLLPEANGHRSTNSPTI VSFAIVSPTQDSRPNMSRPLITRSPASPLNNQGIPTPAQLTKSN APVHIDVGGHMYTSSLATLTKYPESRIGRLFDGTEPIVLDSLKQ HYFIDRDGQMFRYILNFLRTSKLLIPDDFKDYTLLYEEAKYFQL QPMLLEMERWKQDRETGRFSRPCECLVVRVAPDLGERITLSGDK SLIEEVFPEIGDVMCNSVNAGWNHDSTHVIRFPLNGYCHLNSVQ VLERLQQRGFEIVGSCGGGVDSSQFSEYVLRRELRRTPRVPSVI RIKQEPLD
7002	1043	498	PMPSSTRWTTS*TYTDTSSAWACRPTTGTCT*TAAPGPTVRWWP TPCSRHQSRRRLTCWCSTSRPCGR*GGLCVRTAPTRPTTSASSS SWTSAGTSWPAGRRTGTATSGTATTTSVWPGCGTRMWSTQWSSV PRSRSCCSRPATTPPSKPGAPHAPCASSRHLAHGLAPSSPGLPA RGAEVC
7003	818	61	QGRFRAFCWQRDFLQPPGMRLSALLALASKVTLPPHYRYGMSPP GSVADKRKNPPWIRRRPVVVEPISDEDWYLFCGDTVEILEGKDA GKQGKVVQVIRQRNWVVVGGLNTHYRYIGKTMDYRGTMIPSEAP LLHRQVKLVDPMDRKPTEIEWRFTEAGERVRVSTRSGRIIPKPE FPRADGIVPETWIDGPKDTSVEDALERTYVPCLKTLQEEVMEAM GIKETR\NTRRSIGIEPGAEQLLPNFCPSLEG
7004	121	2285	FLLPVLTSRSLRQPAVPHARLGGVEPAAMKSARAKTPRKPTVKK G\PKRTLKTQLG/YYCRVRPLGFPDQECCIEVINNTTVQLHTPE GYRLNRNGDYKETQYSFKQVFGTHTTQKELFDVVANPLVNDLIH GKNGLLFTYGVTGSGKTHTMTGSPGEGGLLPRCLDMIFNSIGSF QAKRYVFKSNDRNSMDIQCEVDALLERQKREAMPNPKTSSSKRQ VDPEFADMITVQEFCKAEEVDEDSVYGVFVSYIEIYNNYIYDLL EEVPFDPINPNLHNLNCPVKIKNHNMYVAGCTEVEVKSTEEAFE VFWRGQKKRRIANTHLNRESSRSHSVFNIKLVQAPLDADGDNVL

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			QEKEQITISQLSLVDLAGSERTNRTRAEGNRLREAGNINQSLMT LRTCMDVLRENQMYGTNKMVPYRDSKLTHLFKNYFDGEGKVRMI VCVNPKAEDYEENLQVMRFAEVTQEVEVARPVDKAICGLTPGRR YRNQPRGP\IGNEPLVTDVVLQSFPPLPSCEILDINDEQTLPRL IEALEKRHNLRQMMIDEFNKQSNAFKALLQEFDNAVLSKENHMQ GKLNEKEKMISGQKLEIERLEKKNKTLEYKIEILEKTTTIYEED KRNLQQELETQNQKLQRQFSDKRRLEARLQGMVTETTMKWEKEC ERRVAAKQLEMQNKLWVKDEKLKQLKAIVTEPKTEKPERPSRER DREKVTQRSVSPSPVPVSYL
7005	63	876	RNMALYQRWRCLRLQGLQACRLHTAVVSTPPRWLAERLGLFEEL WAAQVKRLASMAQKEPRTIKISLPGGQKIDAVAWNTTPYQLARQ ISSTLADTAVAAQVNGEPYDLERPLETDSDLRFLTFDSPEGKAV FWHSSTHVLGAAAEQFLGAVLCRGPSTEYGFYHDFFLGKERTIR GSELPVLERICQELTAAARPFRRLEASRDQLRQLFKDNPFKLHL IEEKVTGPTATVYGCGTLVDLCQGPHLRHTGQIGGLKLLSNSSS LWRSSG
7006	22	898	NAFGRHSTAVKMAAAAWLQVLPVILLLLGAHPSPLSFFSAGPAT VAAADRSKWHIPIPSGKNYFSFGKILFRNTTIFLKFDGEPCDLS LNITWYLKSADCYNEIYNFKAEEVELYLEKLKEKRGLSGKYQTS SKLFQNCSELFKTQTFSGDFMHRLPLLGEKQEAKENGTNLTFIG DKTAMHEPLQTWQDAPYIFIVHIGISSSKESSKENSLSNLFTMT VEVKGPYEYLTLEDYPLMIFFMVMCIVYVLFGVLWLAWSACYWR DLLRIQFWIGAVIFLGMLEKAVFYAGFQ
7007	2	1001	AMTVSGPGTPEPRPATPGASSVEQLRKEGNELFKCGDYGGALAA YTQALGLDATPQDQAVLHRNRAACHLKLEDYDKAETEASKAIEK DGGDVKALYRRSQALEKLGRLDQAVLDLQRCVSLEPKNKVFQEA LRNIGGQIQEKVRYMSSTDAKVEQMFQILLDPEEKGTEKKQKAS QNLVVLAREDAGAEKIFRSNGVQLLQRLLDMGETDLMLAALRTL VGICSEHQSRTVATLSILGTRRVVSILGVESQAVSLAACHLLQV MFDALKEGVKKGFRGKEGAIIVGEWKQVWGLLDVTVMEGMGLSQ PGQFFGDQTCSCRLFGIRFGDIILL
7008	70	1478	CRSALGHERPPPAHLPAGGRRLQTCPRSCRWLGRPPSGLPPGPR SPPPLAGPGQKMVQKKPAELQGFHRSFKGQNPFELAFSLDQPDH GDSDFGLQCSARPDMPASQPIDIPDAKKRGKKKKRGRATDSFSG RFEDVYQLQEDVLGEGAHARVQTCINLITSQEYAVKIIEKQPGH IRSRVFREVEMLYQCQGHRNVLELIEFPEEEDRFYLVFEKMRGG SILSHIHKRRHFNELEASVVVQDVASALDFLHNKGIAHRDLKPE NILCEHPNQVSPVKICDFDLGSGIKLNGDCSPISTPELLTPCGS AEYMAPEVVEAFSEEASIYDKRCDLWSLGVILYILLSGYPPFVG RCGSDCGWDRGEACPACQNMLFESIQEGKYEFPDKDWAHISCAA KDLISKLLVRDAKQRLSAAQVLQHPWVQGCAPENTLPTPMVLQR WDSHFLLPPHPCRIHVRPGGLVRTVTVNE
7009	1	626	ARQLRNSWVDDFVAAPLIPLSQQIPTGNSLYESYYKQVDPAYTG RVGASEAALFLKKSGLSDIILGKIWDLADPEGKGFLDKQGFYVA LRLVACAQSGHEVTLSNLNLSMPPPKFHDTSSPLMVTPPSAEAH WAVRVEEKAKFDGIFESLLPINGLLSGDKVKPVLMNSKLPLDVL GRVWDLSDIDKDGHLVRDEFAVAMHLVYRALE
7010	79	571	SHTRRAVVPETLLSPLCPLLGGGTAMSGGEQKPERYYVGVDVGT GSVRAALVDQSGVLLAFADQPIKNWEPQFNHHEQSSEDIWAACC VVTKKVVQGIDLNQIRGLGFDATCSLVVLDKQFHPLPVNQEGDS HRNVIMWLDHRAVSQVNRINETKHSVLQYVGG
7011	3	994	RIQTLPNQNQSQTQPLLKTPPAVLQPIAPQTTFGVQTQPQPQSL LQAQISAASITPLLQTQPQPLLQQPQQKAGLLQPPVRIVSQPQP ARRLDPPSRFSGRNDRGDQVPNRKDDRSRERERERRRSRERSPQ RKRSRERSPRRERERSPRRVRRVVPRYTVQFSKFSLDCPSCDMM ELRRRYQNLYIPSDFFDAQFTWVDAFPLSRPFQLGNYCNFYVMH

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			REVESLEKNMAILDPPDADHLYSAKVMLMASPSMEDLYHKSCAL AEDPQELRDGFQHPARLVKFLVGMKGKDEAMAIGGHWSPSLDGP DPEKDPSVLIKT\AIRCCKALTG
7012	1	2661	RRAGSVKRGEARLFGPTERQSERPLRPSAARRPEMLSGKKAAAA AAAAAAAATGTEAGPGTAGGSENGSEVAAQPAGLSGPAEVGPGA VGERTPRKKEPPRASPPGGLAEPPGSAGPQAGPTVVPGSATPME TGIAETPEG\RRTSRRKRAKVEYREMDESLANLSEDEYYSEEER NAKAEKEKKLPPPPPQAPPEEENESEPEEPSGVEGAAFQSRLPH DRMTSQEAACFPDIISGPQQTQKVFLFIRNRTLQLWLDNPKIQL TFEATLQQLEAPYNSDTVLVHRVHSYLERHGLINFGIYKRIKPL PTKKTGKVIIGSGVSGLAAARQLQSFGMDVTLLEARDRVGGRV ATFRKGNYVADLGAMVVTGLGGNPMAVVSKQVNMELAKIKQKCP LYEANGQAVPKEKDEMVEQEFNRLLEATSYLSHQLDFNVLNNKP VSLGQALEVVIQLQEKHVKDEQIEHWKKIVKTQEELKELLNKMV NLKEKIKELHQQYKEASEVKPPRDITAEFLVKSKHRDLTALCKE YDELAETQGKLEEKLQELEANPPSDVYLSSRDRQILDWHFANLE FANATPLSTLSLKHWDQDDDFEFTGSHLTVRNGYSCVPVALAEG LDIKLNTAVRQVRYTASGCEVIAVNTRSTSQTFIYKCDAVLCTL PLGVLKQQPPAVQFVPPLPEWKTSAVQRMGFGNLNKVVLCFDRV FWDPSVNLFGHVGSTTASRGELFLFWNLYKAPILLALVAGEAAG IMENISDDVIVGRCLAILKGIFGSSAVPQPKETVVSRWRADPWA RGSYSYVAAGSSGNDYDLMAQPITPGPSIPGAPQPIPRLFFAGE HTIRNYPATVHGALLSGLREAGRIADQFLGAMYTLPRQATPGVP AQQSPSM
7013	1	2661	RRAGSVKRGEARLFGPTERQSERPLRPSAARRPEMLSGKKAAAA AAAAAAAATGTEAGPGTAGGSENGSEVAAQPAGLSGPAEVGPGA VGERTPRKKEPPRASPPGGLAEPPGSAGPQAGPTVVPGSATPME TGIAETPEG\RRTSRRKRAKVEYREMDESLANLSEDEYYSEEER NAKAEKEKKLPPPPPQAPPEEENESEPEEPSGVEGAAFQSRLPH DRMTSQEAACFPDIISGPQQTQKVFLFIRNRTLQLWLDNPKIQL TFEATLQQLEAPYNSDTVLVHRVHSYLERHGLINFGIYKRIKPL PTKKTGKVIIGSGVSGLAAARQLQSFGMDVTLLEARDRVGGRV ATFRKGNYVADLGAMVVTGLGGNPMAVVSKQVNMELAKIKQKCP LYEANGQAVPKEKDEMVEQEFNRLLEATSYLSHQLDFNVLNNKP VSLGQALEVVIQLQEKHVKDEQIEHWKKIVKTQEELKELLNKMV NLKEKIKELHQQYKEASEVKPPRDITAEFLVKSKHRDLTALCKE YDELAETQGKLEEKLQELEANPPSDVYLSSRDRQILDWHFANLE FANATPLSTLSLKHWDQDDDFEFTGSHLTVRNGYSCVPVALAEG LDIKLNTAVRQVRYTASGCEVIAVNTRSTSQTFIYKCDAVLCTL PLGVLKQQPPAVQFVPPLPEWKTSAVQRMGFGNLNKVVLCFDRV FWDPSVNLFGHVGSTTASRGELFLFWNLYKAPILLALVAGEAAG IMENISDDVIVGRCLAILKGIFGSSAVPQPKETVVSRWRADPWA RGSYSYVAAGSSGNDYDLMAQPITPGPSIPGAPQPIPRLFFAGE HTIRNYPATVHGALLSGLREAGRIADQFLGAMYTLPRQATPGVP AQQSPSM
7014	3	3950	DFEVGDKIRILATLEDGWLEGSLKGRTGIFPYRFVKLCPDTRVE ETMALPQEGSLARIPETSLDCLENTLGVEEQRHETSDHEAEEPD CIISEAPTSPLGHLTSEYDTDRNSYQDEDTAGGPPRSPGVEWEM PLATDSPTSDPTEVVNGISSQPQVPFHPNLQKSQYYSTVGGSHP HSEQYPDLLPLEARTRDYASLPPKRMYSQLKTLQKPVLPLYRGS SVSASRVVKPRQSSPQLHNLASYTKKHHTSSVYSISERLEMKPG PQAQGLVMEAATHSQGDGSTDLDSKLTQQLIEFEKSLAGPGTEP DKILRHFSIMDFNSEKDIVRGSSKLITEQELPERRKALRPPPPR PCTPVSTSPHLLVDQNLKPAPPLVVRPSRPAPLPPSAQQRTNAV SPKLLSRHRPTCETLEKEGPGHMGRSLDQTSPCPLVLVRIEEME RDLDMYSRAQEELNLMLEEKQDESSRAETLEDLKFCESNIESLN

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			MELQQLREMTLLSSQSSSLVAPSGSVSAENPEQRMLEKRAKVIE ELLQTERDYIRDLEMCIERIMVPMQQAQVPNIDFEGLFGNMQMV IKVSKQLLAALEISDAVGPVFLGHRDELEGTYKIYCQNHDEAIA LLEIYEKDEKIQKHLQDSLADLKSLYNEWGCTNYINLGSFLIKP VQRVMRYPLLLMELLNSTPESHPDKVPLTNAVLAVKEINVNINE YKRRKDLVLKYRKGDEDSLMEKISKLNIHSIIKKSNRVSSHLKH LTGFAPQIKDEVFEETEKNFRMQERLIKSPIRDLSLYLQHIRES ACVKVVAAVSMWDVCMERGHRDLEQFERVHRYISDQLFTNFKER TERLVISPLNQLLSMFTGPHKLVQKRFDKLLDFYNCTERAEKLK DKKTLEELQSARNNYEALNAQLLDELPKFHQYAQGLFTNCVHGY AEAHCDFVHQALEQLKPLLSLLKVAGREGNLIAIFHEEHSRVLQ QLQVFTFFPESLPATKKPFERKTIDRQSARKPLLGLPSYMLQSE ELRASLLARYPPEKLFQAERNFNAAQDLDVSLLEGDLVGVIKKK DPMGSQNRWLIDNGVTKGFVYSSFLKPYNPRRSHSDASVGSHSS TESEHGSSSPRFPRQNSGSTLTFNPN\S\MAVSFTSGSCQKQPQ DASPPPKEWDQGTLSASLNPSNSESSPSRCPSDPDSTSQPRSGD SADVARDVKQPTATPRSYRNFRHPEIVGYSVPGRNGQSQDLVKG CARTAQAPEDRSTEPDGSEAEGNQVYFAVYTFKARNPNELSVSA NQKLKILEFKDVTGNTEWWLAEVNGKKGYVPSNYIRKTEYT
7015	1842	513	RQAWHE\VAAPSWRGARLVQSVLRVWQVGPHVARERVIPFSSLL GFQRRCVSCVAGSAFSGPRLASASRSNGQGSALDHFLGFSQPDS SVTPCVPAVSMNRDEQDVLLVHHPDMPENSRVLRVVLLGAPNAG KSTLSNQLLGRKVFPVSRKVHTTRCQALGVITEKETQVILLDTP GIISPGKQKRHHLELSLLEDPWKSMESADLVVVLVDVSDKWTRN QLSPQLLRCLTKYSQIPSVLVMNKVDCLKQKSVLLELTAALTEG VVNGKKLKMRQAFHSHPGTHCPSPAVKDPNTQSVGNPQRIGWPH FKEIFMLSALSQEDVKTLKQYLLTQAQPGPWEYHSAVLTSQTPE EICANIIREKLLEHLPQEVPYNVQQKTAVWEEGPGGELVIQQKL LVPKESYVKLLIGPKGHVISQIAQEAGHDLMDIFLCDVDIRLSV KLLK
7016	167	2513	ILNAPKPPPFRDSVEAVAAKRDTGGGSWGTGMDVSGQETDWRST AFRQKLVSQIEDAMRKAGVAHSKSSXDMESHVFLKAKTRDEYLS LVARLIIHFRDIHNKKSQASVSDPMNALQSLTGGPAAGAAGIGM PPRGPGQSLGGMGSLGAMGQPMSLSGQPPPGTSGMAPHSMAVVS TATFQTOLQLQQVAAAAAAATARSSSSSSSRRRYSSSSSSSNSKQ FQAQQSAMQQ\QFQA\VVQQQQQL\QQQQQQCQHLIKLHHQNQQ QIQQQQQQLQRIAQLQLQQQQQQQQQQQQQQQCQALQAQPPIQQP PMQQPQPPPSQALPQQLQQMHHTQHHQPPPQPQQPPVAQNQPSQ LPPQSQTQPLVSQAQALPGQMLYTQPPLKFVRAPMVVQQPPVQP QVQQQQTAVQTAQAAQMVAPGVQVSQSSLPMLSSPSPGQQVQTP QSMPPPPQPSPQPGQPSSQPNSNVSSGPAPSPSSFLPSPSPQPF \QSPVTARTPQNFSVPSPGPLNTPVNPSSVMSPAGSSQAEEQQY LDKLKQLSKYIEPLRRMINKIDKNEDRKKDLSKMKSLLDILTDP SKRCPLKTLQKCEIALEKLKNDMAVPTPPPPPVPPTKQQYLCQP LLDAVLANIRSPVFNHSLYRTFVPAMTAIHGPPITAPVVCTRKR RLEDDERQSIPSVLQGEVARLDPKFLVNLDPSHCSNNGTVHLIC KLDDKDLPSVPPLELSVPADYPAQSPLWIDRQWQYDANPFLQSV HRCMTSRLLQLPDKHSVTALLNTWAQSVHQACLSAA
7017	1	1785	INLGNTCYMNSVI*ALFMATDFRRQVLSLNLNGCNSLMKKLQHL FAFLAHTQREAYAPRIFFEASRPPWFTPRSQCDCSEYLRFLLDR LHEEEKILKVQASHKPSEILECSETSLQEVASKAAVLTETPRTS DGEKTLIEKMFGGKLRTHIRCLNCRSTSQKAEAFTDLSLAFWPS YSLEYMSCPDCSQSPSIQDGGLMQASVPGPSEEPVVYNPTTAAF ICDSLVNEKTIGSPPNEFYCSENTSVPNESNKILVNKDVPQKPG GETTPSVTDLLNYFLAPEILTGDNQYYCENCASLQNAEKTMQIT EEPEYLILTLLRFSYDQKYHVRRKILDNVSLPLVLELPVKRITS

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			FSSLSESWSVDVDFTDLSENLAKKLKPSGTDEASCTKLVPYLLS SVVVHSGISSESGHYYSYARNITSTDSSYQMYHQSEALALASSQ SHLLGRDSPSAVFEQDLENKEMSKEWFLFNDSRVTFTSFQSVQK ITSRFFKDTAYVLLYKKQHSTNGLSGNNPTSGLWINGDPPLQKE LMDAITKDNKLYLQEQELNARARALQAASASCSFRPNGFDDNDP PGSCGPTGGGGGGGFNTVGRLVF
7018	484	1066	SLVFRGNTWSGEAGHHCSALFNLAAYHQLFVGTERIRAPEIIFQ PSLIGEEQAGIAETLQYILDRYPKDVQEMLVQNVFLTGGNTMYP GMKARMEKELLEMRPFRSSFQVQLASNPVLDAWYGARDWALNHL DDNEVWITRKEYEEKGGEYLKEHCASNIYVPIRLPKQASRSSDA QASSKGSAAGGGGAGEQA
7019	1048	335	APGGFLVTMVFPAPSPPWMLGCCSHEVTAGPPTLCKDMSALVAA RMRHIPLAPGSDWRDLPNIEVRLSDGTMARKLRYTHHDRKNGRS SSGALRGVCSCVEAGKACDPAARQFNTLIPWCLPHTGNRHNHWA GLYGRLEWDGFFSTTVTNPEPMGKQGRVLHPEQHRVVSVRECAR SQGFPDTYRLFGNILDKHRQVGNAVPPPLAKAIGLEIKLCMLAK ARESASAKIKEEEAAKD
7020	1	2154	FADSKRKSVLLDKIKNLQVALTSKQQSLETAMSFVARNTFKRVR NGFLMRKVAVFFSNTPTRASPQLREAVLKLSDAGITPLFLTRQE DRQLINALQINNTAVGHALVLPAGRDLTDFLENVLTCHVCLDIC NIDPSCGFGSWRPSFRDRRAAGSDVDIDMAFILDSAETTTLFQF NEMKKYIAYLVRQLDMSPDPKASQHFARVAVVQHAPSESVDNAS MPPVKVEFSLTDYGSKEXLVDFLSRGMTQLQGTRALGSAIEYTI ENVFESAPNPRDLKIVVLMLTGEVPEQQLEEAQRVILQAKCKGY FFVVLGIGRKVNIKEVYTFASEPNDVFFKLVDKSTELNEEPLMR FGRLLPSFVSSENAFYLSPDIRKQCDWFQGDQPTKNLVKFGHKQ VNVPNNVTSSPTSNPVTTTKPVTTTKPVTTTTKPVTTTTKPVTI INQPSVKPAAAKPAPAKPVAAKPVATKTATVRPPVAVKPATAAK PVAAKPAAVRPPAAAAAKPVATKPEVPRPQAAKPAATKPATTKP MVKMSREVQVFEITENSAKLHWERPEPFGPYFYDLTVTSAHDQS LVLKQNLTVTDRVIGGLLAGQTYHVAVVCYLRSQVRATYHGSFS TKKSQPPPPQPARSASSSTINLMVSTEFLALTETDICKLPKDEG TCRDFILKWYYDPNTKSCARFWYGGCGGNENKFGSQKECEKVCA PVLAKPGVISVMGT
7021	2	338	VNAVSFFPNGYAFATGSDDATCRLFDLRADQELLLYSHDNIICG ITSVAFSKSGRLLLAGYDDFNCNVWDTLKGDRAGVLAGHDNRVS CLGVTDDGMAVATGSWDSFLRIWN
7022	2	856	VYIGSFWSHPLLIPDNRKLFEAEEQDLFRDIQSLPRNAALRKLN DLIKRARLAKVHAYIISSLKKEMPSVFGKDNKKKELVNNLAEIY GRIEREHQISPGDFPNLKRMQDQLQAQDFSKFQPLKSKLLEVVD DMLAHDIAQLMVLVRQEESQRPIQMVKGGAFEGTLHGPFGHGYG EGAGEGIDDAEWVVARDKPMYDEIFYTLSPVDGKITGANAKKEM VRSKLPNSVLGKIWKLADIDKDGMLDDDEFALANHLIKVKLEGH ELPNELPAHLLPPSKRKVAE
7023	2	748	AMVFGGVVPYVPQYRDIRRTQNADGFSTYVCLVLLVANILRILF WFGRRFESPLLWQSAIMILTMLLMLKLCTEVRVANELNARRRSF TAADSKDEEVKVAPRRSFLDFDPHHFWQWSSFSDYVQCVLAFTG VAGYITYLSIDSALFVETLGFLAVLTEAMLGVPQLYRNHRHQST EGMSIKMVLMWTSGDAFKTAYFLLKGAPLQFSVCGLLQVLVDLA ILGQAYAFARHPQKPAPHAVHPTGTKAL
7024	1207	190	RTGVTGVVAQVWMFGGGGVLSSGEQLQMPVKPERGLGPSDGWLV SSRRGSPGTVLGLPFWLLTPVLVSRSIRSMLLLTRSPTAWHRLS QLKPPVLPGTLGGQALHLRSWLLSRQGPAETGGQGQPQGPGLRT RLLITGLFGAGLGGAWLALRAEKERLQQQKRTEALRQAAVGQGD FHLLDHRGRARCKADFRGQWVLMYFGFTHCPDICPDELEKLVQV VRQLEAEPGLPPVQPVFITVDPERDDVEAMARYVQDFHPRLLGL

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			TGSTKQVAQASHSYRVYYNAGPKDEDQDYIVDHSIAIYLLNPDG LFTDYYGRSRSAEQISDSVRRHMAAFRSVLS
7025	232	832	ERNSPIGNNENL*K\HSLDCLCFRGDWEGNTQFCTLQDNQEECF KQVIRTCEKRPTFNQHTVFNLHQRLNTGDKLNEFKELGKAFISG SDHTQHQLIHTSEKFCGDKECGNTFLPDSEVIQYQTVHTVKKTY ECKECGKSFSLRSSLTGHKRIHTGEKPFKCKDCGKAFRPHSQLS VHKRIHTGEKSYECKECGKAFSCG
7026	328	1146	NPNPSIGDIKDIKKAAKSMLDPAHKSHFHPVTPSLVFLCFIFDG LHQALLSVGVSKRSNTVVGNENEERGTPYASRFKDMPNFIALEK SSVLRHCCDLLIGVAAGSSDKICTSSLQVQRRFKAMMASIGRLS HGESADLLISCNAESAIGWISSRPWVGELMFTFLFGDFESPLHK LRKSS*LPRKHR*QPINAVRMFLDQCMDGSIALRAIVSEIPVFE EKKNNG*KGIGEIF*VWGCTLPPHYWGAVTTNVPKLSNSGKLLG QDEQPHIFG
7027	43	954	GRRLQQQQRPEDAEDGAEGGGKRGEAGWEGGYPEIVKENKLFEH YYQELKIVPEGEWGQFMDALREPLPATLRITGYKSHAKEILHCL KNKYFKELEDLEMDGQKVEVPQPLSWYPEELAWHTNLSRKILRK SPHLEKFHQFLVSETESGNISRQEAVSMIPPLLLNVRPHHKILD MCAAPGSKTTQLIEMLHADMNVPFPEGFVIANDVDNKRCYLLVH QAKRLSSPCIMVVNHDASSIPRLQIDVDGRKEILFYDRILCDVP CSGDGTMRKNIDVWKKWTTLNSLQLHGLQLRIATRGAEQL
7028	189	608	SRFPPEPEPGTMVEKGSDSSSEKGGVPGTPSTQSLGSRNFIRNS KKMCSWYSMLSPTYKQRNEDFRKLFSKLPEAERLIVDYSCALQR EILLOGRLYLSENWICFYSNIFRWETTISIQLKEVTCLKKEKTA KLIPNAIQ
7029	1343	40	VLESNTEAKQATGTSSKLRHGTGQEKGREGPRCPSGLAQLRLWG /PCPHAGRETGPRASAPIPGS*GHGWHW*RKDGRGERSEGPSAL SPHSPSLLNMQQAPTHVGPGMGSQRPRSSVVPEQVGVGSQLSRE RWRA*RSLPGAAASERTEMTKERSP/RPCQGYDSSNWFTQPGKK TRKRNSRRNTMVSRGGGCLLYPLQSIMPE*QLR*GAHASPPTQG R*GKGGPRSPLTKASGTTHIPTPFFGSIP/RPTRDSGFGTDNS\ AAPGQKRGHREA*QGPEPV/WGRVTTHLQGPAG*TKPLGS\RNW VPGPAEGEQGEGAGLEGRP*PLKGCRSTLTFSPQLSIPMVGKKP PEGTTASFFP\RSCHSE*RKPPPSCPHAPALSLPHPLPLPLPPL PLFLPGAGT*HSARSGRPGQSETGSLCHNCHHCPPHCPKCSPGG T
7030	2	521	FVCFSAPGSGQGGKRRVNMELSAVGERVFAAEALLKRRIRKGRM EYLVKWKGWSQKYSTWEPEENILDARLLAAFEERERSMELYGPK KRGPKPKTFLLKAQAKAKAKTYEFRSDSARGIRIPYPGRSPQDL ASTSRAREGLRN\RVCPRQRAAPAPAAP\PRRGPSGPGPRPG*G PGLHFPGPGGPSKHGFVPASEQHQHQQHLPRRGPSGPGPRPG
7031	960	59	HCSVPGAEWPRKPPAQICPQLTSRPHLSSPRSLSPGCGHSPGPG /CKPS/RHCDELHEGPSRTAALPCGKPQPKHGVEECG/PCPCLA PRRLTEPPALTVSPVGRAAPSGAL*PSGRACSACSHRLAPEAAL SAAAPRPSLGSGQNASGLPAASLPPQDSSQPHKTVPSPARSVPP LGAQARAAPPRLWCPRALVSG*EASPEAVSVAAGPPVPGPTPST SGSTASHSRRGC*SPR*TPAPPRRDHGRSAAFEVLTAAASAQPC ASQGGPRPTGAGRTPSPLGLPFSRGPPAASARPFCRHPSL
7032	1393	2104	RRPGRTEPVEPPPVPPPPRASNSKSRCR*RNLHLAPL*QSPLRK SRQIGTSSLPFGRSAGERPRPAATFCLSRGGSSPVFL*PSSSSL EPWMKRQFGRLHSLFWKSWQKMNSFLLTPKLDTSLMSGWRYRQR LPRLHTFLKKSLQMASELAPPLPTPAPLASSLPPPPGPPPLLPV PLA*LSRSGILVPPNSGFSLSC\PLGDH*GSSGEVRGSCGSPPP HHCWVLPPPP*LLLPPR
7033	689	815	RSRDCLSSSATSNRARRSKCSGPKRATPLDSGPGP*APPGPSSA

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			LMMPSSCPWRTGALGPSPAGSRALGRCTSSVGPGSRWLTRTSSP GCATRTWRTMRMEPRPLRSRMGESAPGIPAELPSAAPSGPSAPS AAAPSAPTTPAAAGPNTL*SRRTAEWCWPPSCSCCWGWC*SWSA WDWRRPPLQVSPAPSSSCRASCCWCLESIT*SSSTARSRATGAS SSSTCPTSRSDRGAAWTP\SPMGAPLLPCSVPLISREEALQDPR NPSP*GVCSGGSSGHAGLALGKPPVACSVP
7034	92	1942	EDTSSMPFRLLIPLGLLCALLPQHHGAPGPDGSAPDPAHYRERV KAMFYHAYDSYLENAFPFDELRPLTCDGHDTWGSFSLTLIDALD TLL\TLFYFQILGNVSEFQRVVEVLQDSVDFDIDVNASVFETNI RVVGGLLSAHLLSKKAGVEVEAGWPCSGPLLRMAEEAARKLLPA FQTPTGMPYGTVNLLHGVNPGETPVTCTAGIGTFIVEFATLSSL TGDPVFEDVARVALMRLWESRSDIGLVGNHIDVLTGKWVAQDAG IGAGVDSYFEYLVKGAILLQDKKLMAMFLEYNKAIRNYTRFDDW YLWVQMYKGTVSMPVFQSLEAYWPGLQSLIGDIDNAMRTFLNYY TVWKQFGGLPEFYNIPQGYTVEKREGYPLRPELIESAMYLYRAT GDPTLLELGRDAVESIEKISKVECGFATIKDLRDHKLDNRMESP FLAETVKYLYLLFDPTNFIHNNGSTFDAVITPYGECILGAGGYI FNTEAHPIDPAALHCCQRLKEEQWEVEDLMREFYSLKRSRSKFQ KNTVSSGPWEPPARPGTLFSPENHDQARERKPAKQKVPLLSCPS QPFTSKLALLGQVFLDSS*PLDNFFIFIFLRLNYNKLLLAIIKK K
7035	92	1942	EDTSSMPFRLLIPLGLLCALLPQHHGAPGPDGSAPDPAHYRERV KAMFYHAYDSYLENAFPFDELRPLTCDGHDTWGSFSLTLIDALD TLL\TLFYFQILGNVSEFQRVVEVLQDSVDFDIDVNASVFETNI RVVGGLLSAHLLSKKAGVEVEAGWPCSGPLLRMAEEAARKLLPA FQTPTGMPYGTVNLLHGVNPGETPVTCTAGIGTFIVEFATLSSL TGDPVFEDVARVALMRLWESRSDIGLVGNHIDVLTGKWVAQDAG IGAGVDSYFEYLVKGAILLQDKKLMAMFLEYNKAIRNYTRFDDW YLWVQMYKGTVSMPVFQSLEAYWPGLQSLIGDIDNAMRTFLNYY TVWKQFGGLPEFYNIPQGYTVEKREGYPLRPELIESAMYLYRAT GDPTLLELGRDAVESIEKISKVECGFATIKDLRDHKLDNRMESP FLAETVKYLYLLFDPTNFIHNNGSTFDAVITPYGECILGAGGYI FNTEAHPIDPAALHCCQRLKEEQWEVEDLMREPYSLKRSRSKFQ KNTVSSGPWEPPARPGTLFSPENHDQARERKPAKQKVPLLSCPS QPFTSKLALLGQVFLDSS*PLDNFFIFIFLRLNYNKLLLAIIKK K
7036	442	761	CLAPLFSCFQIINLHLAPSGRLRWAWLRGPGRN*LPGEGPSIPT RNW*ERKAGCSQPC/PAQQHHGRPPGVSPLPRDPHPTTLRPLPP PPPPPPPPPRRPPRNRRPG
7037	442	761	CLAPLFSCFQIINLHLAPSGRLRWAWLRGPGRN*LPGEGPSIPT RNW*ERKAGCSQPC/PAQQHHGRPPGVSPLPRDPHPTTLRPLPP PPPPPPPPPRRPPRNRRPG
7038	155	891	GAGAASDMSSGLRAADFPRWKRHISEQLRRRDRLQRQAFEEIIL QYNKLLEKSDLHSVLAQKLQAEKHDVPNRHEISPGHDGTWNDNQ LQEMAQLRIKHQEELTELHKKRGELAQ\RVIDLNNQMQRKDREM QMNEAKIAECLQTISDLETECLDLRTKLCDLERANQTLKDEYDA LQITFTALEGKLRKTTEENQELVTRWMAEKAQEANRLNARE*KR LQEAASPAAERACRSSKGTSTSRTG
7039	155	891	GAGAASDMSSGLRAADFPRWKRHISEQLRRRDRLQRQAFEEIIL QYNKLLEKSDLHSVLAQKLQAEKHDVPNRHEISPGHDGTWNDNQ LQEMAQLRIKHQEELTELHKKRGELAQ\RVIDLNNQMQRKDREM QMNEAKIAECLQTISDLETECLDLRTKLCDLERANQTLKDEYDA LQITFTALEGKLRKTTEENQELVTRWMAEKAQEANRLNARE*KR LQEAASPAAERACRSSKGTSTSRTG
7040	34	789	KITPPRRPHRCSSGHGSDNSSVLSGELPPAMGKTALFYHSGGSS GYESVMRDSEATGSASSAQDSTSENSSSVGGRCRSLKTPKKRSN

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			PGSQRRRLIPALSLDTSSPVRKPPNSTGVRWVDGPLRSSPRGLG EPFEIKVYEIDDVERLQRRRGGASKEAMCFNAKLKILEHRQQRI AEVRAKYEWLMKELEATKQYLMLDPNKWLSEFDLEQVWELDSLE YLEALECVTERLESRVNFCKAHLMMITCFDIT
7041	1	567	SGRVAMGRRRAPAGGSLGRALMRHQTQRSRSHRHTDSWLHTSEL NDGYDWGRLNLQSVTEQSSLDDFLATAELAGTEPVAEKLNIKFV PAEARTGLLSFEESQRIKKLHEENKQFLCIPRRPNWNQNTTPEE LKQAEKDNFLEWRRQL\VRLEEEQKLILTPFERNLDFWRQLWRV IERSDIVVQIVDA
7042	7	345	PIHMAAAALRADI\ISPLFPHIQGYLLLSASHG\ATSLHTKGAL PLETVTMYTVIPKSKYVLVKPDTQYPYSENLDEFKRLAENSASN DDLLMAEVAISDYGDKLTLELREKY
7043	2	2170	ARGMAARDSDSEEDLVSYGTGLEPLEEGERPKKPIPLQDQTVRD EKGRYKRFHGAFSGGFSAGYFNTVGSKEGWTPSTFVSSRQNRAD KSVLGPEDFMDEEDLSEFGIAPKAIVTTDDFASKTKDRIREKAR QLAAATAPIPGATLLDDLITPAKLSVGFELLRKMGWKEGQGVGP RVKRRPRRQKPDPGVKIYGCALPPGSSEGSEGEDDDYLPDNVTF APKDVTPVDFTPKDNVHGLAYKGLDPHQALFGTSGEHFNLFSGG SERAGDLGEIGLNKGRKLGISGQAFGVGALEEEDDDIYATETLS KYDTVLKDEEPGDGLYGWTAPRQYKNQKESEKDLRYVGKILDGF SLASKFLSSKKIYPPPELPRDYRPVHYFRPMVAATSENSHLLQV LSESAGKATPDPGTHSKHQLNASKRAELLGETPIQGSATSVLEF LSQKDKERIKEMKQATDLKAAQLKARSLAQRAQSSRAQPSPAAA AGHCSWNMALGGGTATLKASNFKPFAKDPEKQKRYDEFLVHMKQ GQKDALERCLDPSMTEWERGRERDEFARAALLYASSHSTLSSRF THAKEEDDSDQVEVPRDQENDVGDKQSAVKMKMFGKLTRDTFEW HPDKLLFQ/RLVGLPRVKRDKYSVFNFLTLPETASLPTTQASSE KVSQHRGPDKSRKPSRWDTSKHEKKEDSISEFLRLARSKAEPPK QQSSPLVNKEEEHAPELSAN
7044	276	734	EVYLTDEFAKGRKVADLYELVQYAGNIIPRLYLLITVGVVYVKS FPQSRKDILKDLVEMCRGVQHPLRGLFLRNYLLQCTRNILPDEG EPTDEETTGDISDSMDFVLLNFAEMNKLWVRMQHQGHSRDREKR ERERQELRILVGTNLVRLSQV
7045	3	513	LGFKMEALSRAGQEMSLAALKQHDPYITSIADLTGQVALYTFCP KANQWEKTDIEGTLFVYRRSASPYHGFTIVNRLNMHNLVEPVNK DLEFQLHEPFLLYRNASLSIYSIWFYDKNDCHRIAKLMADVVEE ETRRSQQA/RSGQTESQPGQWLQRPQAHRHPGDAEQSQG
7046	3	513	LGFKMEALSRAGQEMSLAALKQHDPYITSIADLTGQVALYTFCP KANQWEKTDIEGTLFVYRRSASPYHGFTIVNRLNMHNLVEPVNK DLEFQLHEPFLLYRNASLSIYSIWFYDKNDCHRIAKLMADVVEE ETRRSQQA/RSGQTESQPGQWLQRPQAHRHPGDAEQSQG
7047	103	486	QMKIEKCGWSEGLTSIKGNCHNFYTAISKDVTYKELKNLLNSKN IMLIDVREIWEILEYQKIPESINVPLDEVGEALQMNPRDFKEKY NEVKPSKSDS/IVFSYLAGVRSKKALDTAISLGFHSYYEF
7048	92	627	FFCLTLLSSWDYRHHATRRVISSPVFTMEDSGKTFSSEEEEANY WKDLAMTYKQRAENTQEELREFQEGSREYEAELETQLQQIETRN RDLLSENNRLRMELETIKEKFEVQHSEGYRQISALEDDLAQTKA IKDQLQKYIRELEQANDDLERAKRATDHGLSKTFE\QRLN\QAI EKKW
7049	393	938	KRTGSASYGGPPPGLGGPATXASVAGRCSSVGKIPARRCYEDEL VPVFEAVGRIYELRLMMDFDGKNRGYAFVMYCHKHEAKRAVREL NNYEIRPGRLLGVCCSVDNCRLFIGGIPKMKKREEILEEIAKVT EGVLDVIVYASAADKMKNRGLRLRGVREPPRGCHWLGRKLIAWX ASSLWG
7050	393	938	KRTGSASYGGPPPGLGGPATXASVAGRCSSVGKIPARRCYEDEL

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			VPVFEAVGRIYELRLMMDFDGKNRGYAFVMYCHKHEAKRAVREL NNYEIRPGRLLGVCCSVDNCRLFIGGIPKMKKREEILEEIAKVT EGVLDVIVYASAADKMKNRGLRLRGVREPPRGCHWLGRKLIAWX ASSLWG
7051	119	816	KKMNLAEICDNAKKGREYALLGNYDSSMVYYQGVMQQIQRHCQS VRDPAIKGKWQQVRQELLEEYEQVKSIVGTLESFKIDKPPDFPV SCQDEPFRDPAVWPPPVPAEHRAPPQIRR/RQSRSKTSEERNGR SRSPGTCRPST\PISKSEKPSTSRDKDYRARGRDDKGRKNMQDG ASDGEMFKFDGAGYDKDLVEALERDIVSRNPSIHWDDIADLEEA KKLLREAGVLPMWM
7052	467	715	SCPGRGKMSKLLNPEEMTSRDYYFDSYAHFGIHEEMLKDEVRTL TYRNSMYHNKHVFKDKVVLDVGSGTGILSMFAARQGPRR
7053	467	715	SCPGRGKMSKLLNPEEMTSRDYYFDSYAHFGIHEEMLKDEVRTL TYRNSMYHNKHVFKDKVVLDVGSGTGILSMFAARQGPRR
7054	1	1036	GTSQRSRETDARRRSAGAEPTARLPWPAALEEWPSCPCEPLGPG RRCRWDAMEYDEKLARFRQAHLNPFNKQSGPRQHEQGPGEEVPD VTPEEALPELPPGEPEFRCPERVMDLGLSEDHFSRPVGLFLASD VQQLRQAIEECKQVILELPEQSEKQKDAVVRLIHLRLKLQELKD PNEDEPNIRVLLEHRFYKEKSKSVKQTCDKCNTIIWGLIQTWYT CTGCYYRCHSKCLNLISKPCVSSKVSHQAEYELNICPETGLDSQ DYRCAECRAPI/CS/DGVVPSEARQCDYTGQYYCSHCHWNDLAV IPARVVHNWDFEPRKVSRCSMRYLALMVSRPVLRLREIN
7055	2	527	DSRRVSWRSWLANE/WGKHLCLFIWLSMNVLLFWKTFLLYNQGP EYHYLRQMLG/ALCLSRASASVLNLNCSLILLPMCRTLLAYLRG SQKVPSRRTRRLLDKSRTFHITCGATICIFSGVHVAAHLVNALN FSVNYSEDFVELNAARYRDEDPRKLLFTTVPGLTGVCMEVVLFL M
7056	2	527	DSRRVSWRSWLANE/WGKHLCLFIWLSMNVLLFWKTFLLYNQGP EYHYLHQMLG/ALCLSRASASVLNLNCSLILLPMCRTLLAYLRG SQKVPSRRTRRLLDKSRTFHITCGATICIFSGVHVAAHLVNALN FSVNYSEDFVELNAARYRDEDPRKLLFTTVPGLTGVCMEVVLFL M
7057	1366	431	GIYLHVNEKIFRPTCIGDRQENDKENLNLENHRDQELLHASCQA SGEVPSQASLRGFFTEDEPGCFGEGENLPEALQNIQDEGTGEQL SPQERISEKQLGQHLPNPHSGEMSTMWLEEKRETSQKGQPRAPM AQKLPTCRECGKTFYRNSQLIFHQRTHTGETYFQCTICKKAFLR SSDFVKHQRTHTGEKPCKCDYCGKGFSDFSGLRHHEKIHTGEKP YKCPICEKSFIQRSNFNRHQRVHTGEKPYKCSHCGKSFSWSSSL DKHQRSHLGKKPFQ*PVTKLSFPISISQPSHKNTQLHQEELCLR GYPC
7058	1	469	FSGFGAVPDALGCRMSDLRITEAFLYMDYLCFRALCCKGPPPAR PEYDLVCIGLTGSGKTSLLSKLCSESPDNVVSTTGPSIKAVPFQ NAILNVKELGGADNIRKYWSRYYQGSQGVIFVLDSASSEDDLEA ARN*SCTQLLQHPQLCTLPFLILA
7059	1	1178	WPAFPRQPAAAAMDALLGTGPRRARGCLGAAGPTSSGRAARTPA APWARPSAWLECVCVVTFDLELGQALELVYPNDFRLTDKEKSSI CYLSFPDSHSGCLGDTQFSFRMRQCGGQRSPWHADDRHYNSRAP VALQREPAHYFGYVYFRQVKDSSVKRGYFQKSLVLVSRLPFVRL FQALLSLIAPEYFDKLAPCLEAVCSEIDQWPAPAPGQTLNLPVM GVVVQVRIPSRVDKSESSPPKQFDQENLLPAPVVLASVHELDLF RCFRPVLTHMQTLWELMLLGEPLLVLAFSPDVSSEMVLALTSCL QPLRFCCDFRPYFTIHDSEFKEFTTRTQAPPNVVLGVTNPFFIK TLQHWPHILRVGEPKMSGDLPKQVKLKKPFKV*RPWDTKP
7060	90	1670	SVNLPPSLWPWEEAMDSTKSEPLKGSFEAEDGNIEYKKLVNPSQ YRFEHLVTQMKWRLQEGRGEAVYQIGVEDNGLLVGLAEEEMRAS

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			LKTLHRMAEKVGADITVLREREVDYDSDMPRKITEVLVRKVPDN QQFLDLRVAVLGNVDSGKSTLLGVLTQGELDNGRGRARLNLFRH LHEIQSGRTSSISFEILGFNSKGEVHGINGTQWGQTLRMGW*** RT*DGGRVWRLFEIV*MNALRGL*TSSAPLRKSMGNQLN*IKNG VKIKRQGHPGNGLGPGNSEGVGRAGRRH*GPWALGQVVNYSDSR TAEEICESSSKMITFIDLAGHHKYLHTTIFGLTSYCPDCALLLV SANTGIAGTTREHLGLALALKVPFFIVVSKIDLCAKTTVERTVR QLERVLKQPGCHKVPMLVTSEDDAVTAAQQFAQSPNVTPIFTLS SVSGESLDLLKVFLNILPPLTNSKEQEELMQQLTEFQVDEIYTV PEVGTVVGGTLSR*IDLLATLPTQPSPIYSKTSWPKGGDPGI
7061	364	710	ARMPSPLGPPCLPVMDPETTLEEPETARLRFRGFCYQEVAGPRE ALARLRELCCQWLQPEAHSKEQMLEMLVLEQFLGTLPPEIQAWV RGQRPGSPEEAAALVEGLQHDP*ARMPSPLGPPCLPVMDPETTL EEPETARLRFRGFCYQEVAGPREALARLRELCCQWLQPEAHSKE QMLEMLVLEQFLGTLPPEIQAWVRGQRPGSPEEAAALVEGLQHD PGQLLG
7062	71	744	AKAGTNLERLHWLSYFFCIPKHKLKSSQKDKVRQFMACTQAGER TAIYCLTQNEWRLDEATDSFFQNPDSLHRESMRNAVDKKKLERL YGRYKDPQDENKIGVDGIQQFCDDLSLDPASISVLVIAWKFRAA TQCEFSRKEFLDGMTELGCDSMEKLKALLPRLEQELKDTAKFKD FYQFTFTFAKNPGQKGLDL*MAGAYWKLVLSGRFKFLYLWNTPL MEHH
7063	2	562	LRTVPDLPGRRFRAMRTGQRR*PELPPDMNSLEQAEDLKAFERR LTEYIHCLQPATGRWRMLLIVVSVCTATGAWNWLIDPETQKVSF FTSLWNHPFFTISCITLIGLFFAGIHKRVVAPSIIAARCRTVLA EYNMSCDDTGKLILKPRPHVQ*QSSLIVMGLKIAFLRISDTAKS HKGFLLRLDM
7064	300	684	RDTGSDPSSTRRLCSTCCTGH*PAEPIASPHPSRGTCPPASSAS SRRTGCWTCPPESGHAQARRSRRASASRWGARGAVRSAVAARGC SSRAGRWLETPGRRRGPPACAAAAGRLRGPAP*AAPPTASVPAR CRCPAARTGAPAAATWLRRRLSGLRAPALGRRRSPGPSPKSAAP PLLTPLGAGRAGGSRANS
7065	1	555	ATTTHSARRSGRGAAAEAAASAAGGRQKGFDRKAWEGRRTTPGG RSQSEPKAPPPQKRSEAAFASMAHSPVAVCVPGMQNNIADPEEL FTKLERIGKGSFGEVFKGIDNRTQQVVAIKIIDLEEAEDEIEDI QQEITVLSQCDSSYVTKYYGSYLKGSKLWIIMEYLGGGSALDLL RAGPFDEFQ
7066	356	676	PGPQRGPWRAREGGHPLDPADHPRAPASLRSNVRAATMMQICDT YNQKHSLFNAMNRFIGAVNNMDQTVMVPSLLRDVPLADPGLDND VGVEVGGSGGCLEERTPP
7067	152	973	KENITMATEIGSPPRFFHMPRFQHQAPROLFYKRPDFAQQQAMQ QLTFDGKRMRKAVNRKTIDYNPSVIKYLENRIWQRDQRDMRAIQ PDAGYYNDLVPPIGMLNNPMNAVTTKFVRTSTNKVKCPVFVVRW TPEGRRLVTGASSGEFTLWNGLTFNFETILQAHDSPVRAMTWSH NDMWMLTADHGGYVKYWQSNMNNVKMFQAHKEAIREARFIHNIP FSVVPIVMVKLFSKCILGAEMHGLCQFLGNFLHPINTIFFFVFT HSPFCWAPF
7068	222	816	DTMKEYVLLLFLALCSAKPFFSPSHIALKNMMLKDMEDTDDDDD DDDDDDDDDDEDNSLFPTREPRSHFFPFDLFPMCPFGCQCYSRV VHCSDLGLTSVPTNIPFDTRMLDLQNNKIKEIKENDFKGLTSLY GLILNNNKLTKIHPKAFLTTKKLRRLYLSHNQLSEIPLNLPKSL AELRIHENKVKKIQKDTFKKK
7069	1147	1765	FRDHRRYFYVNEQSGESQWEFPDGEEEEEESQAQENRDETLAKQ TLKDKTGTDSNSTESSETSTGSLCKESFSGQVSSSSLMPLTPFW TLLQSNVPVLQPPLPLEMPPPPPPPPESPPPPPPPPPAPKMPPP

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			EKTKKGRKDKAKKSKTKMPSLVKKWQSIQRELDEEDNSSSSEED RVSTAQKRIEEWKQQQLVSGMAERNANFEA
7070	1	547	DGTMEDSEAVQRATALIEQRLAQEEENEKLRGDARQKLPMDLLV LEDEKHHGAQSAALQKVKGQERVRKTSLDLRREIIDVGGIQNLI ELRKKRKQKKRDALAASHEPPPEPEEITGPVDEETFLKAAVEGK MKVIEKFLADGGSADTCDQFRRTALHRASLEGHMEILEKLLDNG ATVDFQ
7071	2	921	ARGTLRALETAKKVGKVGANGQKAAGPSADSVTENKIGSPPKTP VSNVAATSAGPSNVGTELNSVPQKSSPFLTRVPAYPPHSENIQY FQDPRTQIPFEVPQYPQTGYYPPPPTVPAGVAPCVPRFVRSNNV PESSLPPASMPYADHYSTFSPRDRMNSSPYQPPPPQPYGPVPPV PSGMYAPVYDSRRIWRPPMYQRDDIIRSNSLPPMDVMHSSVYQT SLRERYNSLDGYYSVACQPPSEPRTTVPLPREPCGHLKTSCEEQ IRRKPDQWAQYHTQKAPLVSSTLPVATQSPTPPSTLNRGEGS
7072	2	921	ARGTLRALETAKKVGKVGANGQKAAGPSADSVTENKIGSPPKTP VSNVAATSAGPSNVGTELNSVPQKSSPFLTRVPAYPPHSENIQY FQDPRTQIPFEVPQYPQTGYYPPPPTVPAGVAPCVPRFVRSNNV PESSLPPASMPYADHYSTFSPRDRMNSSPYQPPPPQPYGPVPPV PSGMYAPVYDSRRIWRPPMYQRDDIIRSNSLPPMDVMHSSVYQT SLRERYNSLDGYYSVACQPPSEPRTTVPLPREPCGHLKTSCEEQ IRRKPDQWAQYHTQKAPLVSSTLPVATQSPTPPSTLNRGEGS
7073	50	504	LAHGSFGVSDFPAPAAAPAHTLTSFSGSLSPQFRKPLGRAPAMP LVRYRKVVILGYRCVGKTSLAHQFVEGEFSEGYDPTVENTYSKI VTLGKDEFHLHLVDTAGQDEYSILPYSFIIGVHGYVLVYSVTSL HSFQVIESLYQKLHEGHGK
7074	263	1003	VCPVLCSTRQEPGHSSLVTYFGKPTRRKEFLLGHCIAAGKMNIS VDLETNYAELVLDVGRVTLGENSRKKMKDCKLRKKQNERVSRAM CALLNSGGGVIKAEIENEDYSYTKDGIGLDLENSFSNILLFVPE YLDFMQNGNYFLIFVKSWSLNTSGLRITTLSSNLYKRDITSAKV MNATAALEFLKDMKKTRGRLYLRPELLAKRPRVDIQEENNMKAL AGVFFDRTELDRKEKLTFTESTHVEI
7075	598	1005	NYINFFFRKEYPPHVQKVEINPVRLSRLQGVERIMKKTEESESQ VEPEIKRKVQQKRHCSTYQPTPPLSPASKKCLTHLEDLQRNCRQ AITLNESTGPLLRTSIHQNSGGQKSQNTGLTTKKFYGNNVEKVP IDII
7076	279	1049	LQSESSNAAEGNEQRHEDEQRSKRGGWSKGRKRKKPLRDSNAPK SPLTGYVRFMNERREQLRAKRPEVPFPEITRMLGNEWSKLPPEE KQRYLDEADRDKERYMKELEQYQKTEAYKVFSRKTQDRQKGKSH RQDAARQATHDHEKETEVKERSVFDIPIFTEEFLNHSKAREAEL RQLRKSNMEFEERNAALQKHVESMRTAVEKLEVDVIQERSRNTV LQQHLETLRQVLTSSFASMPLPEXGETPTVDTIDSYM
7077	3	1119	SSMGSNSEINGLALRKTDKYGFLGGSQYSGSLKSSIPVDVARQR ELKWLDMFSNWDKWLSRRFQKVKLRCRKGIPSSLRAKAWQYLSN SKELLEQNPRKFEELERAPGDPKWLDVIEKDLHRQFPPHEMFAA RGGHGQQDLYRILKAYTIYRPDEGYCQAQAPVAAVLLMHMPAEQ AFWCLVQICDKYLPGYYSAGLEAIQLDGEIFFALLRRASPLAHR HLRRQRIDPVLYMTEWFMCIFARTLPWASVLRVWDMFFCEGVKI IFRVALVLLRHTLGSVEKLRSCQGMYETMEQLRNLPQQCMQEDF LVHEVTNLPVTEALIERENAAQLKKWRETRGELQYRPSRRLHGS RAIHEERRRQQPPLGPSSS
7078	483	767	FQGQRMAGEQKPSSNLLEQFILLAKGTSGSALTALISQVLEAPG VYVFGELLELANVQELAEGANAAYLQLLNLFAYGTYPDYIANKE SLPELY
7079	2	376	SVVEFKRPKEPSGSDGESDGPIDVGQEGQLSQMARPLSTPSSSQ MQARKKRRGIIEKRRRDRINSSLSELRRLVPTAFEKQGSSKLEK

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			AEVLQMTVDHLKMLHATGGTGTHALLFQASFIQQIF
7080	200	595	VQLPLEAPCLSLLSCRDHSGGNRDLSRRHRDCRVYGSPQDGIPY LTHPLCHQDVVSVGRLQIRALATPGHTQGHLVYLLDGEPYKGPS CLFSGDLLFLSGCGEFPRKREELGEEGETEVRAATVPWRALKP
7081	213	506	AVTEEEMILNSLSLCYHNKLILAPMVRVGTLPMRLLALDYGADI VYCEELIDLKMIQCKRVVNEVLSTVDFVAPDDRVVFRTCEREQN RVVFQMGTS
7082	3	1137	APSRNTMLMAWCRGPVLLCLRQGLGTNSFLHGLGQEPFEGARSL CCRSSPRDLRDGEREHEAAQRKAPGAESCPSLPLSISDIGTGCL SSLENLRLPTLREESSPRELEDSSGDQGRCGPTHQGSEDPSMLS QAQSATEVEERHVSPSCSTSRERPFQAGELILAETGEGETKFKK LFRLNNFGLLNSNWGAVPFGKIVGKFPGQILRSSFGKQYMLRRP ALEDYVVLMKRGTAITFPKDINMILSMMDINPGDTVLEAGSGSG GMSLFLSKAVGSQGRVISFEVRKDHHDLAKKNYKHWRDSWKLSH VEEWPDNVDFIHKDISGATEDIKSLTFDAVALDMLNPHVTLPVF YPHLKHGGVCPVYVVNITQVIELLD
7083	115	541	RSNAVQLTRMEYAMKSLSLLYPKSLSRHVSVRTSVVTQQLLSEP SPKAPRARPCRVSTADRSVRKGIMAYSLEDLLLKVRDTLMLADK PFPLVLEEDGTTVETEEYFQALAGDTVFMVLQKGQKWQPPSEQG TRHPLSLSHK
7084	3	522	NSVSVSSQSRFLASVPGTGVQRSAAADMAASTAAGKQRIPKVAK VKNKAPAEVQITAEQLLREAKERELELLFPPPPQQKITDEEELND YKLRKRKTFEDNIRKNRTVISNWIKYAQWEESLKEIQRARSIYE RALDVDYRNITLWLKYAEMEMKNRQVNHARNIWDRAITTL
7085	243	1499	RQLARLRRRGWRSPFGGAPMAHITINQYLQQVYEAIDSRDGASC AELVSFKHPHVANPRLQMASPEEKCQQVLEPPYDEMFAAHLRCT YAVGNHDFIEAYKCQTVIVQSFLRAFQAHKEENWALPVMYAVAL DLRVFANNADQQLVKKGKSKVGDMLEKAAELLMSCFRVCASDTR AGIEDSKKWGMLFLVNQLFKIYFKINKLHLCKPLIRAIDSSNLK DDYSTAQRVTYKYYVGRKAMFDSDFKQAEEYLSFAFEHCHRSSQ KNKRMILIYLLPVKMLLGHMPTVELLKKYHLMQFAEVTRAVSEG NLLLLHEALAKHEAFFIRCGIFLILEKLKIITYRNLFKKVYLLL KTHQLSLDAFLVALKFMQVEDVDIDEVQCILANLIYMGHVKGYI SHQHQKLVVSKQNPFPPLSTGC
7086	256	525	ILAARMGKQNSKLRPEVMQDLLESTDFTEHEIQEWYKGFLRDCP SGHLSMEEFKKIYGNFFPYGDASKFAEHVFRTFDANGDGTIDFR EF
7087	166	723	LSGSSAGKVAAPCVPPSNHELVPITTENAFKNVVDKGEGASRGG NTRKSLEDNGSTRVTPSVQPHLQPIRNMSVSRTMEDSCELDLVY VTERIIAVSFPSTANEENFRSNLREVAQMLKSKHGGNYLLFNLS ERRPDITKLHAKVLEFGWPDLHTPALEKICSICKAMDTWLNAHP HRCRVLHNKG
7088	104	759	GTSAASPSSLLEMAGEITETGELYSSYVGLVYMFNLIVGTGALT MPKAFATAGWLVSLVLLVFLGFMSFMTTTFVIEAMAAANAQLHW KRMENLKEEEDDDSSTASDSDVLIRDNYERAEKRPILSVQRRGS PNPFEITDRVEMGQMASMFFNKVGVNLFYFCIIVYLYGDLAIYA AAVPFSLMQVTCSATGNDSCGVEADTKYNDTDRCWGPLRRVD
7089	33	1775	SVCWEDRYLKARMEESPLSRAPSRGGVNFLNVARTYIPNTKVEC HYTLPPGTMPSASDWIGIFKVEAACVRDYHTFVWSSVPESTTDG SPIHTSVQFQASYLPKPGAQLYQFRYVNRQGQVCGQSPPFQFRE PRPMDELVTLEEADGGSDILLVVPKATVLQNQLDESQQERNDLM QLKLQLEGQVTELRSRVQELERALATARQEHTELMEQYKGISRS HGEITEERDILSRQQGDHVARILELEDDIQTISEKVLTKEVELD RLRDTVKALTREQEKLLGQLKEVQADKEQSEAELQVAQQENHHL NLDLKEAKSWQEEQSAQAQRLKDKVAQMKDTLGQAQORVAELEP

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			LKEQLRGAQELAASSQQKATLLGEELASAAAARDRTIAELHRSR LEVAEVNGKLAELGLHLKEEKCQWSKERAGLLQSVEAEKDKILK LSAEILRLEKAVQEERTQNQVFKTELAREKDSSLVQLSESKREß TELRSALRVLQKEKEQLQEEKQELLEYMRKLEARLEKVADEKWN EDATTEDEEAAVGLSCPAALTDSEDESPEDMRLHPMAFVSVETQ ASLLLGLE
7090	33	1775	SVCWEDRYLKARMEESPLSRAPSRGGVNFLNVARTYIPNTKVEC HYTLPPGTMPSASDWIGIFKVEAACVRDYHTFVWSSVPESTTDG SPIHTSVQFQASYLPKPGAQLYQFRYVNRQGQVCGQSPPFQFRE PRPMDELVTLEEADGGSDILLVVPKATVLQNQLDESQQERNDLM QLKLQLEGQVTELRSRVQELERALATARQEHTELMEQYKGISRS HGEITEERDILSRQQGDHVARILELEDDIQTISEKVLTKEVELD RLRDTVKALTREQEKLLGQLKEVQADKEQSEAELQVAQQENHHL NLDLKEAKSWQEEQSAQAQRLKDKVAQMKDTLGQAQQRVAELEP LKEQLRGAQELAASSQQKATLLGEELASAAAARDRTIAELHRSR LEVAEVNGKLAELGLHLKEEKCQWSKERAGLLQSVEAEKDKILK LSAEILRLEKAVQEERTQNQVFKTELAREKDSSLVQLSESKREL TELRSALRVLQKEKEQLQEEKQELLEYMRKLEARLEKVADEKWN EDATTEDEEAAVGLSCPAALTDSEDESPEDMRLHPMAFVSVETQ ASLLLGLE
7091	186	1076	EGMLTREHRCGRSEEQELEPWPSPKKARSGRWLRNGFKRKMEEF EEPADSGQSLVPVYIYSPEYVSMCDSLAKIPKRASMVHSLIEAY ALHKQMRIVKPKVASMEEMATFHTDAYLQHLQKVSQEGDDDHPD SIEYGLGYDCPATEGIFDYAAAIGGATITAAQCLIDGMCKVAIN WSGGWHHAKKDEASGFCYLNDAVLGILRLRRKFERILYVDLDLH HGDGVEDAFSFTSKVMTVSLHKFSPGFFPGTGDVSDVGLGKGRY YSVNVPIQDGIQDEKYYQICERYEPPAPNPGL
7092	522	809	KQGINEDQEESQKFRLGEGCEPISKRQMKKLIKQKQWEEQRELR KQKRKEKRKRKKLERQCQMEPNSDGHDRKRVRRDVVHSTLRLII DCSFDXLM
7093	454	655	NFGVSGVELAQQASMVRMSFVIAACQLVLGLLMTSLTESSIQNS ECPQLCVCEIRPWFTPQSTYREA
7094	2	508	FVRSMHWGVGFASSRPCVVDLSWNQSISFFGWWAGSEEPFSFYG DIIAFPLQDYGGIMAGLGSDPWWKKTLYLTGGALLAAAAYLLHE LLVIRKQQEIDSKDAIILHQFARPNNGVPSLSPFCLKMETYLRM ADLPYQNYFGGKLSAQGKMPWIEYNHEKVSGTEFII
7095	1	411	IASSLPKMASLLCSDRVLYLVQGEKKVRAPLSQLYFCRYCSELR SLECVSHEVDSHYCPSCLENMPSAEAKLKKNRCANCFDCPGCMH TLSTRATSISTQLPDDPAKTTMKKAYYLACGFCRWTSRDVGMAD KSVGE
7096	224	2067	ETRSLAVQEKPSQAGRRRSSRISFAGALFLTRPLLQELLLNNFC SAMSPAPDAAPAPASISLFDLSADAPVFQGLSLVSHAPGEALAR APRTSCSGSGERESPERKLLQGPMDISEKLFCSTCDQTFQNHQE QREHYKLDWHRFNLKQRLKDKPLLSALDFEKQSSTGDLSSISGS EDSDSASEEDLQTLDRERATFEKLSRPPGFYPHRVLFQNAQGQF LYAYRCVLGPHQDPPEEAELLLQNLQSKGPRDCVVLMAAAGHFA GAIFQGREVVTHKTFHRYTVRAKRGTAQGLRDARGGPSHSAGAN LRRYNEATLYKDVRDLLAGPSWAKALEEAGTILLRAPRSGRSLF FGGKGAPLQRGDPRLWDIPLATRRPTFQELQRVLHKLTTLHVYE EDPREAVRLHSPOTHWKTVREERKKPTEEEIRKICRDEKEALGQ NEESPKQGSGSGEGEDGFQVELELVELTVGTLDLCESEVLPKRRR RKRNKKEKSRDQEAGAHRTLLQQTQEEEPSTQSSQAVAAPLGPL LDEAKAPGQPELWNALLAACRAGDVGVLKLQLAPSPADPRVLSL LSAPLGSGGFTLLHAAAAAGRGSVVRLLLEAGADPTVQCQDH
7097	256	1228	IRTKSAATWEAWPQCGREGSRIITEPCEANAGSRQELQTBRISS FLAAQGDQAFHSGLETNNSNSELPLRVGLKVAQGSPLMGGQVSA

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			SNSFSRLHCRNANEDWMSALCPRLWDVPLHHLSIPGSHDTMTYC LNKKSPISHEESRLLQLLNKALPCITRPVVLKWSVTQALDVTEQ LDAGVRYLDLRIAHMLEGSEKNLHFVHMVYTTALVEDTLTEISE WLERHPREVVILACRNFEGLSEDLHEYLVACIKNIFGDMLCPRG EVPTLRQLWSRGQQVIVSYEDESSLRRHHELWPGVPYWWGNRVK TEALIRYLETMKSCGR
7098	82	956	SSFLKRCRKVLGCWGIPSEQSLFSTLEEPRDKEIDNYCVMRLQT EARSGFWAPNRFPVNICRMTAVDGDRGGSSRETCRCHFHPSLEA LVLLLQDWQPGGVGICTSFLGISWALLDYHRALRTCLPSKPLLG LGSSVIYFLWNLLLLWPRVLAVALFSALFPSYVALHFLGLWLVL LLWVWLQGTDFMPDPSSEWLYRVTVATILYFSWFNVAEGRTRGR AIIHFAFLLSDSILLVATWVTHSSWLPSGIPLQLWLPVGCGCPFF LGLALRLVYYHWLHPSCCWKPDPDQVD
7099	992	210	LFRLAPGFLRSLARQGYHQIWAFPFLPSGATATWPAASRSRSLA ARSLPRSPARPGPNDALLGEHDFRGQGVRAQRFRFSEEPGPGAD GAVLEVHVPQIGAGVSLPGILAAKCGAEVILSDSSELPHCLEVC RQSCQMNNLPHLQVVGLTWGHISWDLLALPPQDIILASDVFFEP EDFEDILATIYFLMHKNPKVQLWSTYQVRSADWSLEALLYKWDM KCVHIPLESFDADKEDIAESTLPGRHTVEMLVISFAKDSL
7100	205	671	ANGGFWEAAPGSEVSLPLWVPTASHSKTTALGIGSAPPPHLSVL FLFSFPPQLGDPLEAFPVFKKYDRNGLNVSIECKRVSGLEPATV DWAFDLTKTNMQTMYEQSEWGWKDREKREEMTDDRAWYLIAWEN SSVPVAFSHPRFDVERGDEVLYW
7101	2	503	WRGGPRRAKRLAGGAVGWVLLVRGVHSVRAGGGRPPRAADMKKD VRILLVGEPRVGKTSLIMSLVSEEFPEEVPPRAEEITIPADVTP ERVPTHIVDYSEAEQSDEQLHQEISQANVICIVYAVNNKHSIDK VTSRWIPLINERTDKDSRLPLILGGNKSDLVEYSR
7102	2	503	WRGGPRRAKRLAGGAVGWVLLVRGVHSVRAGGGRPPRAADMKKD VRILLVGEPRVGKTSLIMSLVSEEFPEEVPPRAEEITIPADVTP ERVPTHIVDYSEAEQSDEQLHQEISQANVICIVYAVNNKHSIDK VTSRWIPLINERTDKDSRLPLILGGNKSDLVEYSR
7103	119	438	GSQSSVAVNIRSGTDEESMDLMNGQASSVNIAATASEKSSSSES LSDKGSELKKSFDAVVFDVLKVTPEEYAGQITLMDVPVFKAIQP DELSSCGWNKKEKYSSAP
7104	1670	795	RLWEHRSVSAGASGWGLSSPGCLLLHPSLPEEERVDILINNAGV MRCPHWTTEDGFEMQFGVNHLGEAWAGAAPWVQAILPRRPPKVL GF*V*VKSDLFIILNPGHFLLTNLLLDKLKASAPSRIINLSSLA HVAGHIDFDDLNWQTRKYNTKAAYCQS\KLAIVLFTKELSRRLQ GSGVTVNALHPGVARTELGRHTGIHGSTFLQHHN\WAJILLAAWS KSPRSWPAPAQHNTLAVAEELA\VISGKYFDGLKQKAPAPEAED EEVARRLWAESARLVGLEAPSVREQPLPR
7105	765	143	GQMCRRPSPKSTSCLSMTCDLP/RGLQDPQCLALFRVAVDKHQA LLKAAMSGQGVDRHLFALYIVSRFLHLQSPFLTQVHSEQWQLST SQIPVQQMHLFDVHNYPDYVSSGGGFGPADDHGYGVSYIFMGDG MITFHISSKKSSTKTDSHRLGQHIEDALLDVASLFQAGQHFKRR FRGSGKENSRHRCGFLSRQTGASKASMTSTDF
7106	14	1064	GLQAGHPHPRSASRIPEADTH\YSKLQRAFDSIVNKDHKRMFGT YFRVGFFGSKFGDLDEQEFVYKEPAITKLPEISHRLEAFYGQCF GAEFVEVIKDSTPVDKTKLDPNKAYIQITFVEPYFDEYEMKDRV TYFEKNFNLRRFMYTTPFTLEGRPRGELHEQYRRNTVLTTMHAF PYIKTRISVIQKEEFVLTPIEVAIEDMKKKTLQLAVAINQEPPD AKMLQMVLQGSVGATVNQGPLEVAQVFLAEIPADPKLYRHHNKL RLCFKEFIMRCGEAVEKNKRLITADQREYQQELKKNYNKLKENL RPMIERKIPELYKPIFRVESQKRDSFHRSSFRKCETQLSQGS
7107	1145	591	*I*WLQTGKKK

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7108	1	942	VKVALLLTNLEQPRTESEWENSPTLKMFLFQFVNLNSSTFYIAF FLGRFTGHPGAYLRLINRWRLEECHPSGCLIDLCMQMGIIHVLK QTWNNFMELGYPLIQNWWTRRKVRQEHGPERKISFPQWEKDYNL QPMNAYGLFDEYLEMILQFGFTTIFVAAFPLAPLLALLNNIIEI RLDAYKFVTQWRRPLASRAKDIGIWYGILEGIGILSVITNAFVI AITSDFIPRLVYAYKYGPCAGQGEAGQKCMVGYVNASLSVFRIS DFENRSEPESDGSEFSGTPLKYCRYRDYRDPPHSLVPYGYTLQF WEVLAW
7109	964	102	WDQRKRNSLVPGPAHGPAQEEPWEKKESLGAAQEALSIQLQPKE TQPFPKSEQVYLHFLSVVTEDGPEPKDKGSLPQPPITEVESQVF SEKLATDTSTFEATSEGTLELQQRNPKAERLRWSPAQEESFRQM VVIHKEIPTGKKDHECSECGKTFIYNSHLVVHQRVHSGEKPYKC SDCGKTFKQSSNLGQHQRIHTGEKPFECNECGKAFRWGAHLVQH QRIHSGEKPYECNECGKAFSQSSYLSQHRRIHSGEKPFICKECG KAYGWCSELIRHRRVHARKEPSH
7110	96	697	RLDNFSGFLVEVTKEERHIVKPLYDRYRLVKQMLTRASITPVLG SPSTKRRGQMLQPIIEGETAHFFEEIKEEEEDGVNLSSELGDML KTAVQVQSSLKNSESDVEENQEKLALDLRLSSSRAASMPELLEQ LKKARAEKKKLRKTLREFEEAFYQQNGRNAQKEDRVPVLEEYRE YKKIKAKLRLLEVLISKQDSSKSI
7111	2	414	GSGLYRGPTPGGQCIWKPNSMPPDHERNFGFTQFALELNELTAE LKRSLPSTDTRLRPDQRYLEEGNIQAAEAQKRRIEQLORDRRKV MEENNIVHQARFFRRQTDSSGKEWWVTNNTYWRLRAEPGYGNMD GAVLW
7112	103	495	PRCFPVADRGRLIGGLPDVVTIMEGKTLNLTCTVFGNPDPEVIW FKNDQDIQLSEHFSVKVEQAKYVSMTIKGVTSEDSGKYSINIKN KYGGEKIDVTVSVYKHGEKIPDMAPPQQAKPKLIPASASAAGQ
7113	1	824	KCLRQAWHEAPSSLAFTRWCSREERAEGGGNLHRSITRDPKPPG LRPSQRPMDDKKKKRSPKPCLAQPAQAPGTLRRVPVPTSHSGSL ALGLPHLPSFKQRAKFKRVGKEKCRPVLAGGGSGSAGTPLQHSF LTEVTDVYEMEGGLLNLLNDFHSGRLQAFGKECSFEQLEHVREM QEKLARLHFSLDVCGEEEDDEEEEDGVTEGLPEEQKKTMADRNL DQLLSNLGSCLGALVPGGMRGGEGTYSQSHSWALGEKVGVHGSK SSGPLNLPRR
7114	3	1492	VWEVDEQIDHYKESQDKFLWQAAFIGKETLKDESGQECKICRKI IYLNTDFVSVKQRLPKYYSWERCSKHHLNFLGQNRSYVRKKDDG CKAYWKVCLHYNLHKAQPAERFFDPNQRGKALHQKQALRKSQRS QTGEKLYKCTECGKVFIQKANLVVHQRTHTGEKPYECCECAKAF SQKSTLIAHQRTHTGEKPYECSECGKTFIQKSTLIKHQRTHTGE KPFVCDKCPKAFKSSYHLIRHEKTHIRQAFYKGIKCTTSSLIYQ RIHTSEKPQCSEHGKASDEKPSPTKHWRTHTKENIYECSKCGKS FRGKSHLSVHQRIHTGEKPYECSICGKTFSGKSHLSVHHRTHTG EKPYECRRCGKAFGEKSTLIVHQRMHTGEKPYKCNECGKAFSEK SPLIKHQRIHTGEKPYECTDCKKAFSRKSTLIKHQRIHTGEKPY KCSECGKAFSVKSTLIVHHRTHTGEKPYECRDCGKAFSGKSTLI KHQRSHTGDKNL
7115	1	947	NAAHGYNWGLWCMYIIPPQDWLDRGDESAPIRTPAMIGCSFVVD REYFGDIGLLDPGMEVYGGENVKLGMRVWQCGGSMEVLPCSRVA HIERTRKPYNNDIDYYAKRNALRAAEVWMDDFKSHVYMAWNIPM SNPGVDFGDVSERLALRQRLKCRSFKWYLENVYPEMRVYNNTLT YGEVRNSKASAYCLDQGAEDGDRAILYPCHGMSSQLVRYSADGL LQLGPLGSTAFLPDSKCLVDDGTGRMPTLKKCEDVARPTQRLWD FTQSGPIVSRATGRCLEVEMSKDANFGLRLVVQRCSGQKWMIRN WIKHARH
7116	866	95	RVRMRRNAEVIEEKLSMKSWAKFRPGEPWKGYPNIDPETDPYVT PGSVINNLSINTVREVDHLRDRNSGSSSSLNTTLPSTSAWSSIR

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			ASNYNVPLSSTAQSTSARNSDSKLTWSPGSVTNTSLAHELWKVP LPPKNITAPSRPPPGLTGQKFPLSTWDNSPLRIGGGWGNSDARY TPGSSWGESSSGRITNWLVLKNLTPQIDGSTLRTLCMQHGPLJT FHLNLPHGNALVRYSSKEEVVKAQKSLHISDLFLLTL
7117	695	1261	LLISTPGGCHPPPSSIEFTYTGAWGKALPAPHMPCAPGALPQGA FVSQAARAIPLLQPSQAAQAEGLSQPARACGALCSLPWPLRNWG SPILRLPGGLRTPTNDRKTRTRSAMACWARAQWDTLGPLKLSHR GKVCLRHPRPTGVRGGPGAAGRQGGMGTRRRGTFTSGARDPGGL RVKHRCQPTGHLP
7118	49	1863	PHCEPNPGAGAMVLLHVLFEHAVGYALLALKEVEEISLLQPQVE ESVLNLGKFHSIVRLVAFCPFASSQVALENANAVSEGVVHEDLR LLLETHLPSKKKKVLLGVGDPKIGAAIQEELGYNCQTGGVIAEI LRGVRLHFHNLVKGLTDLSACKAQLGLGHSYSRAKVKFNVNRVD NMIIQSISLLDQLDKDINTFSMRVREWYGYHFPELVKIINDNAT YCRLAQFIGNRRELNEDKLEKLEELTMDGAKAKAILDASRSSMG MDISAIDLINIESFSSRVVSLSEYRQSLHTYLRSKMSQVAPSLS ALIGEAVGARLIAHAGSLTNLAKYPASTVQILGAEKALFRALKT RGNTPKYGLIFHSTFIGRAAAKNKGRISRYLANKCSIASRIDCF SEVPTSVFGEKLREQVEERLSFYETGEIPRKNLDVMKEAMVQAE EAAAEITRKLEKQEKKRLKKEKKRLAALALASSENSSSTPEECE EMSEKPKKKKKQKPQEVPQENGMEDPSISFSKPKKKKSFSKEEL MSSDLEETAGSTSIPKRKKSTPKEETVNDPEEAGHRSGSKKKRK FSKEEPVSSGPEEAAGKSSSKKKKKFHKASQED
7119	49	1863	PHCEPNPGAGAMVLLHVLFEHAVGYALLALKEVEEISLLQPQVE ESVLNLGKFHSIVRLVAFCPFASSQVALENANAVSEGVVHEDLR LLLETHLPSKKKKVLLGVGDPKIGAAIQEELGYNCQTGGVIAEI LRGVRLHFHNLVKGLTDLSACKAQLGLGHSYSRAKVKFNVNRVD NMIIQSISLLDQLDKDINTFSMRVREWYGYHFPELVKIINDNAT YCRLAQFIGNRRELNEDKLEKLEELTMDGAKAKAILDASRSSMG MDISAIDLINIESFSSRVVSLSEYRQSLHTYLRSKMSQVAPSLS ALIGEAVGARLIAHAGSLTNLAKYPASTVQILGAEKALFRALKT RGNTPKYGLIFHSTFIGRAAAKNKGRISRYLANKCSIASRIDCF SEVPTSVFGEKLREQVEERLSFYETGEIPRKNLDVMKEAMVQAE EAAAEITRKLEKQEKKRLKKEKKRLAALALASSENSSSTPEECE EMSEKPKKKKKQKPQEVPQENGMEDPSISFSKPKKKKSPSKEEL MSSDLEETAGSTSIPKRKKSTPKEETVNDPEEAGHRSGSKKKRK FSKEEPVSSGPEEAAGKSSSKKKKKFHKASQED
7120	1991	64	QLGTRRCLRGDKVTNAMQDFLVTNLEPRFIEPQTARLSVVFKDS NSTTPLIFVLSPGTDPAADLYKFAEEMKFSKKLSAISLGQGQGF RAEAMMRSSIERGKWVFFQNCHLAPSWMPALERLIEHINPDKVH RDFRLWLTSLPSNKFPVSILQNGSKMTIEPPRGVRANLLKSYSS LGEDFLNSCHKVMEFKSLLLSLCLFHGNALERRKFGPLGFNIPY EFTDGDLRICISQLKMFLDEYDDIPYKVLKYTAGEINYGGRVTD DWDRRCIMNILEDFYNPDVLSPEHSYSASGIYHQIPPTYDLHGY LSYIKSLPLNDMPEIFGLHDNANITFAQNETFALLGTIIQLQPK SSSAGSQGREEIVEDVTQNILLKVPEPINLQWVMAKYPVLYEES MNTVLVQEVIRYNRLLQVITQTLQDLLKALKGLVVMSSQLELMA ASLYNNTVPELWSAKAYPSLKPLSSWVMDLLQRLDFLQAWIQDG IPAVFWISGFFFPQAFLTGTLQNFARKFVISIDTISFDFKVMFE APSELTQRPQVGCYIHGLFLEGARWDPEAFQLAESQPKELYTEM AVIWLLPTPNRKAQDQDFYLCPIYKTLTRAGTLSTTGHSTNYVI AVEIPTHQPQRHWIKRGVALICALDY
7121	2	546	RPLRPWVLSLGSMVGLMTYGRRQFQSLDTTMRRLIPPFREASAK LTTLVDADAEAFTAYLEAMRLPKNTPEEKDRRTAALQEGLRRAV SVPLTLAETVASLWPALQELARCGNLACRSDLQVAAKALEMGVF GAYFNVLINLRDITDEAFKDQIHHRVSSLLQEAKTQAALVLDCL

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			ETRQE
7122	2	546	RPLRPWVLSLGSMVGLMTYGRRQFQSLDTTMRRLIPPFREASAK LTTLVDADAEAFTAYLEAMRLFKNTPEEKDRRTAALQEGLRRAV SVPLTLAETVASLWPALQELARCGNLACRSDLQVAAKALEMGVP GAYFNVLINLRDITDEAFKDQIHHRVSSLLQEAKTQAALVLDCL ETRQE
7123	1	1092	KPAVPEARSAGTSEAGRSGAEEVSCGSVSGDGAAMRLTPRALCS AAQAAWRENFPLCGRDVARWFFGHMAKGLKKMQSSLKLVDCIIE VHDARIPLSGRNPLFQETLGLKPHLLVLNKMDLADLTEQQKIMQ HLEGEGLKNVIFTNCVKDENVKQIIPMVTELIGRSHRYHRKENL EYCIMVIGVPNVGKSSLINSLRRQHLRKGKATRVGGEPGITRAV MSKIQVSERPLMFLLDTPGVLAPRIESVETGLKLALCGTVLDHL VGEETMADYLLYTLNKHQRFGYVQHYGLGSACDNVERVLKSVAV KLGKTQKVKVLTGTGNVNVIQPNYPAAARDFLQTFRRGLLGSVM LDLDVLRGHPRV
7124	2	382	LPLTLLLAAPFAHLLLPPGHDQSPCWHPGPALSPGTLGPLSWAM ANSGLQLLGYFLALGGWVGIIASTALPQWKQSSYAGDASIQLRS KVFVLESEWGGDSLGLPRDCGWSCLLHSAVRSEKGFWS
7125	166	1127	NCISEKRNYSFSMQKGKGRTSRIRRRKLCGSSESRGVNESHKSE FIELRKWLKARKFQDSNLAPACFPGTGRGLMSQTSLQEGQMIIS LPESCLLT\RDTVIRSYLGAYITKWKPPPSPLLALCTFLVSEKH AGHRSLLEA\YLEILPKAYTCPVCLEPEVVNLLPKSLKAKAEEQ RAHVQEFFASSRDFFSSLQPLFAEAVDSIPSYSALLWAWCTVNT RAVYL\SPGSGNAFLQSRTPVCLAPYLDLLNHSPHVQVKAAFNE ETHSYEIRTTSRWRKHEEVFICYGPHDNQRLFLEYGFVSVHNPH ACVYVSRGWNQLCS
7126	1	733	CRDMAAFIVPSPARRCSQKGSLGHLPTQPWLWAAMSPRGQERGT SHSQAREPQRPGRWLLGSLQSSPGTLGQAGTASRRRGCMVQRWV QVATGRRAVQVPKGALGLALGETSPGASRGMSGGAGGCWALGWA PSPVLPSWLLEGPPPWLSIISDSGTQRPSPRRCPARPSPWGPQC WRGGRIASAEASST*TPGSGSRARSGRRSPGSRRRSASAPSPTP PTDACA*SCVARPAGSRSSRPAAA
7127	1311	277	GLPAMCST*KAGYYEETEGDCIPKDR*IEKRPFKEI*RRIPRIF AKQKQI*S*NSQKIGASEIDRGRKEADCSDAPAAARIGAVSVFR RSTQEARVSPRSNAKSANLRAVRAD*WEHFVLLFHTPEQFLAEC ICRST**K*WHQLC*PLSSL*TGLKRKLLL*VLFRI*WLKDCDV *FCQKIFATNFCNWQNLIQ*EE*KPVEYSVEN*HIMNLLLPM*L CQSSLRDQTIVTWRM*RNYSMFRINMISSL*DGSIHIPLKLHFY PALIFTLTVPINSCCQRPLPLFAHQSIKTLASSGSPMLACLRFL LVKKRAFIHTPRSPGCSV*CKHVLVKDNKNNCVGSEV
7128	2	5228	GRVDLWTILLGRSALRELSQIEAELNKHWRRLLEGLSYYKPPSP SSAEKVKANKDVASPLKELGLRISKFLGLDEEQSVQLLQCYLQE DYRGTRDSVKTVLQDERQSQALILKIADYYYEERTCILRCVLHL LTYFQDERHPYRVEYADCVDKLEKELVSKYRQQFEELYKTEAPT WETHGNLMTERQVSRWFVQCLREQSMLLEIIFLYYAYFEMAPSD LLVLTKMFKEQGFGSRQTNRHLVDETMDPFVDRIGYFSALILVE GMDIESLHKCALDDRRELHQFAQDGLICQDMDCLMLTFGDIPHH APVLLAWALLRHTLNPEETSSVVRKIGGTAIQLNVFQYLTRLLQ SLASGGNDCTTSTACMCVYGLLSFVLTSLELHTLGNQQDIIDTA CEVLADPSLPELFWGTEPTSGLGIILDSVCGMFPHLLSPLLQLL RALVSGKSTAKKVYSFLDKMSFYNELYKHKPHDVISHEDGTLWR RQTPKLLYPLGGQTNLRIPQGTVGQVMLDDRAYLVRWEYSYSSW TLFTCEIEMLLHVVSTADVIQHCQRVKPIIDLVHKVISTDLSIA DCLLPITSRIYMLLQRLTTVISPPVDVIASCVNCLTVLAARNPA KVWTDLRHTGFLPFVAHPVSSLSQMISAEGMNAGGYGNLLMNSE QPQGEYGVTIAFLRLITTLVKGQLGSTQSQGLVPCVMFVLKEML

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			PSYHKWRYNSHGVREQIGCLILELIHAILNLCHETDLHSSHTPS LQFLCICSLAYTEAGQTVINIMGIGVDTIDMVMAAQPRSDGAEG QGQGQLLIKTVKLAFSVTNNVIRLKPPSNVVSPLEQALSQHGAH GNNLIAVLAKYIYHKHDPALPRLAIQLLKRLATVAPMSVYACLG NDAAAIRDAFLTRLQSK\IE\DMRIK\VMIL\EFLTVA\VETQP GLIELFLNLEVKDG\SDGSKEFSLGMW\SCLHAV/VWELIDSQQ QDRYWCPPLLHRAAIAFLHALWQDRRDSAMLVLRTKPKFWENLT SPLFGTLSPPSETSEPSILETCALIMKIICLEIYYVVKGSLDQP LKDTLKKFSIEKRFAYWSGYVKSLAVHVAETEGSSCTSLLEYQM LVSAWRMLLIIATTHADIMHLTDSVVRRQLFLDVLDGTKALLLV PASVNCLRLGSMKCTLLLILLRQWKRELGSVDEILGPLTEILEG VLQADQQLMEKTKAKVFSAFITVLQMKEMKVSDIPQYSQLVLNV CETLQEEVIALFDQTRHSLALGSATEDKDSMETDDCSRSRHRDQ RDGVCVLGLHLAKELCEVDEDGDSWLQVTRRLPILPTLLTTLEV SLRMKQNLHFTEATLHLLLTLARTQQGATAVAGAGITQSICLPL LSVYQLSTNGTAQTPSASRKSLDAPSWPGVYRLSMSLMEQLLKT LRYNFLPEALDFVGVHQERTLQCLNAVRTVQSLACLEEADHTVG FILQLSNFMKEWHFHLPQLMRDIQVNLGYLCQACTSFLHSRKML QHYLQNKNGDGLPSAV\AQRV\QRPPSAASAAPSSSKQPAADTE ASEQQALHTVQYGLLKILSKTLAALRHFTPDVCQILLDQSLDLA EYNFLFALSFTTPTFDSEVAPSFGTLLATVNVALNMLGELDKKK EPLTQAVGLSTQAEGTRTLKSLLMFTMENCFYLLISQAMRYLRD PAVHPRDKQRMKQELSSELSTLLSSLSRYFRRGAPSSPATGVLP SPQGKSTSLSKASPESQEPLIQLVQAFVRHMQR
7129	1	1054	FRRRFRWRRRLH*AGPASSAGGSPGEASGTMSGELPPNINIKEPR WDQSTFIGRANHFFTVTDPRNILLTNEQLESARKIVHDYRQGIV PPGLTENELWRAKYIYDSAFHPDTGEKMILIGRMSAQVPMNMTI TGCMMTFYRTTPAVLFWQWINQSFNAVVNYTNRSGDAPLTVNEL GTAYVSATTGAVATALGLNALTKHVSPLIGRFVPFAAVAAANCI NIPLMRQRELKVGIPVTDENGNRLGESANAAKQAITQVVVSRIL MAAPGMAIPPFIMNTLEKKAFLKRFPWMSAPIQVGLVGFCLVFA TPLCCALFPQKSSMSVTSLEAELQAKIQESHPELRRVYFNKGL
7130	2	760	HEVPSLQTSDPLPGSVQRCSVVVSQPNKENWCCDHLYNSLGRKG ISAKSQPYHRSQSSSSVLINKSMDSINYPSDVGKQQLLSLHRSS RCESHQDLLPDIADSHQQGTEKLSDLTLQDSQKVVVVNRNLPLN AQIATQNYFSNFKETDGDEDDYVEIKSEEDESELELSHNRRRKS DSKFVDADFSDNVCSGNTLHSLNSPRTPKKPVNSKLGLSPYLTP YNDSDKLNDYLWRGPSPNQQNIVQSLREKFQCLSSSSFA
7131	805	573	AAAEGHIEVVKFLIEACKVNPFAKDRWGNIPLDDAVQFNHLEVV KLLQDYQDSYTLSETQAEAAAEALSKENLESMV
7132	1420	1067	IDMLLLSGALVSGPYTLITTAVSADLGTHKSLKGNAHALSTVTA IIDGTGSVGAALGPLLAGLLSPSGWSNVFYMLMFADACALLFLI RLIHKELSCPGSATGDQVPFKEQ
7133	2	3648	QQIPGLLPAHGESGDALRKPRLQKPITGHLDDLFFTLYPSLEKF EEELLELHVQDHFQEGCGPLDGGALEILERRLRVGVHNGLGFVQ RPQVVVLVPEMDVALTRSASFSRKVVSSSKTSSGSQALVLRSRL RLPEMVGHPAFAVIFQLEYVFSSPAGVDGNAASVTSLSNLACMH MVRWAVWNPLLEADSGRVTLPLQGGIQPNPSHCLVYKVPSASMS SEEVKQVESGTLRFQFSLGSEEHLDAPTEPVSGPKVERRPSRKP PTSPSSPPAPVPRVLAAPQNSPVGPGLSISQLAASPRSPTQHCL ARPTSQLPHGSQASPAQAQEFPLEAGISHLEADLSQTSLVLETS IAEQLQELPFTPLHAPIVVGTQTRSSAGQPSRASMVLLQSSGFP EILDANKQPAEAVSATEPVTFNPQKEESDCLQSNEMVLQFLAFS RVAQDCRGTSWPKTVYFTFQFYRFPPATTPRLQLVQLDEAGQPS SGALTHILVPVSRDGTFDAGSPGFQLRYMVGPGFLKPGERRCFA RYLAVQTLQIDVWDGDSLLLIGSAAVQMKHLLRQGRPAVQASHE

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			LEVVATEYEQDNMVVSGDMLGFGRVKPIGVHSVVKGRLHLTLAN VGHPCEQKVRGCSTLPPSRSRVISNDGASRFSGGSLLTTGSSRR KHVVQAQKLADVDSELAAMLLTHARQGKGPQDVSRESDATRRRK LERMRSVRLQEAGGDLGRRGTSVLAQQSVRTQHLRDLQVIAAYR ERTKAESIASLLSLAITTEHTLHATLGVAEFFEFVLKNPHNTQH TVTVEIDNPELSVIVDSQEWRDFKGAAGLHTPVEEDMFHLRGSL APQLYLRPHETAHVPFKFQSFSAGQLAMVQASPGLSNEKGMDAV SPWKSSAVPTKHAKVLFRASGGKPIAVLCLTVELQPHVVDQVFR FYHPELSFLKKAIRLPPWHTFPGAPVGMLGEDPPVHVRCSDPNV ICETQNVGPGEPRDIFLKVASGPSPEIKDFFVIIYSDRWLATPT QTWQVYLHSLQRVDVSCVAGQLTRLSLVLRGTQTVRKVRAFTSH PQELKTDPKGVFVLPPRGVQDLHVGVRPLRAGSRFVHLNLVDVD CHQLVASWLVCLCCRQPLISKAFEIMLAAGEGKGVNKRITYTNP YPSRRTFHLHSDHPELLRFREDSPQVGGGETYTIGLQFAPSQRV GEEEILIYINDHEDKNEEAFCVKVIYQ
7134	2115	1111	GGEGFSYPPHVGLSLGTPLDPHYVLLEVHYDNPTYEEGLIDNSG LRLFYTMDIRKYDAGVIFAGLWVSLFHTIPPGMPEFQSEGHCTL ECLEEALEAEKPSGIHVFAVLLHAHLAGRGIRLRHFRKGKEMKL LAYDDDFDFNFQEFQYLKEEQTILPGDNLITECRYNTKDRAEMT WGGLSTRSEMCLSYLLYYPRINLTRCASIPDIMEQLQFIGVKEI YRPVTTWPFIIKSPKQYKNLSFMDAMNKFKWTKKEGLSFNKLVL SLPVNVRCSKTDNAEWSIQGMTALPPDIERPYKAEPLVCGTSSS SSLHRDFSINLLVCLLLLSCTLSTKSL
7135	2	2072	FVPRVTPRSLSLQGPKGESVGSITQPLPSSYLIFRAASESDGRC WLDALELALRCSSLLRLGTCKPGRDGEPGTSPDASPSSLCGLPA SATVHPDQDLFPLNGSSLENDAFSDKSERENPEESDTETQDHSR KTESGSDQSETPGAPVRRGTTYVEQVQEELGELGEASQVETVSE ENKSLMWTLLKQLRPGMDLSRVVLPTFVLEPRSFLNKLSDYYYH ADLLSRAAVEEDAYSRMKLVLRWYLSGFYKKPKGIKKPYNPILG ETFRCCWFHPQTDSRTFYIAEQVSHHPPVSAFHVSNRKDGFCIS GSITAKSRFYGNSLSALLDGKATLTFLNRAEDYTLTMPYAHCKG ILYGTMTLELGGKVTIECAKNNFQAQLEFKLKPFFGGSTSINQI SGKITSGEEVLASLSGHWDRDVFIKEEGSGSSALFWTPSGEVRR QRLRQHTVPLEEQTELESERLWQHVTRAISKGDQHRATQEKFAL EEAQRQRARERQESLMPWKPQLFHLDPITQEWHYRYEDHSPWDP LKDIAQFEQDGILRTLQQEAVARQTTFLGSPGPRHERSGPDQRL RKASDQPSGHSQATESSGSTPESCPELSDEEQDGDFVPGGESPC PRCRKEARRLQALHEAILSIREAQQBLHRHLSAMLSSTARAAQA PTPGLLQSPRSWFLLCVFLACQLFINHILK
7136	2	418	DFVPSFRRPSGNTSQTVWLLRAATLEKEVAGLREKIHHLDDMLK SQQRKVRQMIEQLQNSKAVIQSKDATIQELKEKIAYLEAENLEM HDRMEHLIEKQISHGNFSTQARAKTENPGSIRISKPPSPKPMPV IRVVET
7137	2	466	WASGMSTVPGGSRHSLGIQVRGGWGVTGGEEESLTVPVADTWQA GSFKVATQERNPQRAQMRLRRQKKGVVPFLGDFLTELQRLDSAI PDDLDGNTNKRSKEVRVLQEMQLLQVAAMNYRLRPLEKFVTYFT RMEQLSDKESYKLSCQLEPENP
7138	2	466	WASGMSTVPGGSRHSLGIQVRGGWGVTGGEEESLTVPVADTWQA GSFKVATQERNPQRAQMRLRRQKKGVVPFLGDFLTELQRLDSAI PDDLDGNTNKRSKEVRVLQEMQLLQVAAMNYRLRPLEKFVTYFT RMEQLSDKESYKLSCQLEPENP
7139	1	357	SLRNSARGLKMAASAARGAAALRRSINQPVAFVRRIPWTAASSQ LKEHFAQFGHVRRCILPFDKETGFHRGLGWVQFSSEEGLRNALQ QENHIIDGVKVQVHTRRRPKLPQTSDDEKKDF
7140	1401	1957	RASSLQVLKAWGGLIPSSFQQQHTGQYALEELFDLKVYDCFCSF NMNVSLEKQLRPSCPWPRGKCRKTPGWEEARPKAQDLRGDLGKT

SEQ ID NO:	Predicted beginning nucleotide location corresponding to first amino acid residue of amino acid sequence	Predicted end nucleotide location corresponding to first amino acid residue of amino acid sequence	Amino acid segment containing signal peptide (A=Alanine, C=Cysteine, D=Aspartic Acid, E=Glutamic Acid, F=Phenylalanine, G=Glycine, H=Histidine, I=Isoleucine, K=Lysine, L=Leucine, M=Methionine, N=Asparagine, P=Proline, Q=Glutamine, R=Arginine, S=Serine, T=Threonine, V=Valine, W=Tryptophan, Y=Tyrosine, X=Unknown, *=Stop Codon, /=possible nucleotide deletion, \=possible nucleotide insertion)
			QAGPAEAHTRGPPRLPAATGCPPHLPGLLSGISVDIDPTGLQSQ WTPKGQDPPLMFSEDYQKSLLEQYHLGLDQKLRKYVVGELIWNF ADFMTNQCG
7141	124	1073	LDSRSCWLDMEDLEEDVRFIVDETLDFGGLSPSDSREEEDITVL VTPEKPLRRGLSHRSDPNAVAPAPQGVRLSLGPLSPEKLEEILD EANRLAAQLEQCALQDRESAGEGLGPRRVKPSPRRETFVLKDSP VRDLLPTVNSLTRSTPS/LKQPDASTPE***EGVSQGSPGYIWK EALQHEEGVTHLQSVPCIQKPSIFSS\SRSTPPVRGRAGPSGRA AASEETRAAKLRGAAAKSSCQLPIPSAIPRPASRMPLTSRSVPP GRGALPPDSLSTRKGLPRPSTAGHRVRESGHKVPVSQRLNLPVM GATRSNLQPP
7142	658	839	LIFLMLHMELKMLSSVTLHIRAFLYWICLKPTSCLIFQNVLNLL KK*SRAVGVVVVMCRT/YSSDLQVGVIKPWLLLGSQDAAHDLDT LKKNKVTHILNVAYGVENAFLSDFTYKSISILDLPETNILSYFP ECFEFIEEAKRKDGVVLVHCNA
7143	3	773	SLEMSSDGEPLSRMDSEDSISSTIMDVDSTISSGRSTPAMMNGQ GSTTSSSKNIAYNCCWDQCQACFNSSPDLADHIRSIHVDGQRGG VFVCLWKGCKVYNTPSTSQSWLQRHMLTHSGDKPFKCVVGGCNA SFASQGGLARHVPTHFSQQNSSKVSSQPKAKEESPSKAGMNKRR KLKNKRRRSLARPHDFFDAQTLDAIRHRAICFNLSAHIESLGKG HSVVFHSTVSILLFFQIKYKTLQKNISTIISKSLKI
7144	1	988	FRVNMQDGGPSPAEHSKAEESAGMEARFLGLPDAAGSSGPTPAR RCPAPRPAGVSYVIRDEVEKYNRNGVNALQLDPALNRLFTAGRD SIIRIWSVNQHKQDPYIASMEHHTDWVNDIVLCCNGKTLISASS DTTVKVWNAHKGFCMSTLRTHKDYVKALAYAKDKELVASAGLDR QIFLWDVNTLTALTASNNTVTTSSLSGNKDSIYSLAMNQLGTII VSGSTEKVLRVWDPRTCAKLMKLKGHTDNVKALLLNRDGTQCLS GSSDGTIRLWSLGQQRCIATYRVHDEGVWALQVNDAFTHVYSGG RDRKIYCTDLRNPDIRVLICE

TRADOCS:1416260.1(%CSK01!.DOC)

WHAT IS CLAIMED IS:

1.   An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of SEQ ID NO:1-1786 and 3573-5358, a mature protein coding portion of SEQ ID NO:1-1786 and 3573-5358, an active domain of SEQ ID NO:1-1786 and 3573-5358, and complementary sequences thereof.

2.   An isolated polynucleotide encoding a polypeptide with biological activity, wherein said polynucleotide hybridizes to the polynucleotide of claim 1 under stringent hybridization conditions.

3.   An isolated polynucleotide encoding a polypeptide with biological activity, wherein said polynucleotide has greater than about 90% sequence identity with the polynucleotide of claim 1.

4.   The polynucleotide of claim 1 wherein said polynucleotide is DNA.

5.   An isolated polynucleotide of claim 1 wherein said polynucleotide comprises the complementary sequences.

6.   A vector comprising the polynucleotide of claim 1.

7.   An expression vector comprising the polynucleotide of claim 1.

8.   A host cell genetically engineered to comprise the polynucleotide of claim 1.

9.   A host cell genetically engineered to comprise the polynucleotide of claim 1 operatively associated with a regulatory sequence that modulates expression of the polynucleotide in the host cell.

10.   An isolated polypeptide, wherein the polypeptide is selected from the group consisting of:

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(a)   a polypeptide encoded by any one of the polynucleotides of claim 1; and

(b)   a polypeptide encoded by a polynucleotide hybridizing under stringent conditions with any one of SEQ ID NO: 1-1786 and 3573-5358.

11.   A composition comprising the polypeptide of claim 10 and a carrier.

12.   An antibody directed against the polypeptide of claim 10.

13.   A method for detecting the polynucleotide of claim 1 in a sample, comprising:

a)   contacting the sample with a compound that binds to and forms a complex with the polynucleotide of claim 1 for a period sufficient to form the complex; and

b)   detecting the complex, so that if a complex is detected, the polynucleotide of claim 1 is detected.

14.   A method for detecting the polynucleotide of claim 1 in a sample, comprising:

a)   contacting the sample under stringent hybridization conditions with nucleic acid primers that anneal to the polynucleotide of claim 1 under such conditions;

b)   amplifying a product comprising at least a portion of the polynucleotide of claim 1; and

c)   detecting said product and thereby the polynucleotide of claim 1 in the sample.

15.   The method of claim 14, wherein the polynucleotide is an RNA molecule and the method further comprises reverse transcribing an annealed RNA molecule into a cDNA polynucleotide.

16.   A method for detecting the polypeptide of claim 10 in a sample, comprising:

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a)   contacting the sample with a compound that binds to and forms a complex with the polypeptide under conditions and for a period sufficient to form the complex; and

b)   detecting formation of the complex, so that if a complex formation is detected, the polypeptide of claim 10 is detected.

17.   A method for identifying a compound that binds to the polypeptide of claim 10, comprising:

a)   contacting the compound with the polypeptide of claim 10 under conditions sufficient to form a polypeptide/compound complex; and

b)   detecting the complex, so that if the polypeptide/compound complex is detected, a compound that binds to the polypeptide of claim 10 is identified.

18.   A method for identifying a compound that binds to the polypeptide of claim 10, comprising:

a)   contacting the compound with the polypeptide of claim 10, in a cell, under conditions sufficient to form a polypeptide/compound complex, wherein the complex drives expression of a reporter gene sequence in the cell; and

b)   detecting the complex by detecting reporter gene sequence expression, so that if the polypeptide/compound complex is detected, a compound that binds to the polypeptide of claim 10 is identified.

19.   A method of producing the polypeptide of claim 10, comprising,

a)   culturing a host cell comprising a polynucleotide sequence selected from the group consisting of a polynucleotide sequence of SEQ ID NO:1-1786 and 3573-5358, a mature protein coding portion of SEQ ID NO:1-1786 and 3573-5358, an active domain of SEQ ID NO:1-1786 and 3573-5358, complementary sequences thereof and a polynucleotide sequence hybridizing under stringent conditions to SEQ ID NO:1-1786 and 3573-5358, under conditions sufficient to express the polypeptide in said cell; and

b)   isolating the polypeptide from the cell culture or cells of step (a).

20. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of any one of the polypeptides SEQ ID NO:1787 -3572 and 5359-7144, the mature protein portion thereof, or the active domain thereof.

21. The polypeptide of claim 20 wherein the polypeptide is provided on a polypeptide array.

22. A collection of polynucleotides, wherein the collection comprising the sequence information of at least one of SEQ ID NO:1-1786 and 3573-5358.

23. The collection of claim 22, wherein the collection is provided on a nucleic acid array.

24. The collection of claim 23, wherein the array detects full-matches to any one of the polynucleotides in the collection.

25. The collection of claim 23, wherein the array detects mismatches to any one of the polynucleotides in the collection.

26. The collection of claim 22, wherein the collection is provided in a computer-readable format.

27. A method of treatment comprising administering to a mammalian subject in need thereof a therapeutic amount of a composition comprising a polypeptide of claim 10 or 20 and a pharmaceutically acceptable carrier.

28. A method of treatment comprising administering to a mammalian subject in need thereof a therapeutic amount of a composition comprising an antibody that specifically binds to a polypeptide of claim 10 or 20 and a pharmaceutically acceptable carrier.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07H 21/04; C12N 15/11, 15/63, 15/70, 15/82, 15/85; C07K 14/00

US CL : 536/23.1; 435/320.1, 455, 468, 530/300, 350

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 536/23.1; 435/320.1, 455, 468, 530/300, 350

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

MEDLINE, EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WAJIMA et al. The cDNA cloning and transient expression of an ovary-specific 17beta-hydroxysteroid dehydrogenase of chickens. Gene. 1999, Vol.233, pages 75-82	1-11, 13-16, and 19-26
A	US 5,175,095 A (MARTINEAU et al) 29 December 1992 (29.12.1992), see especially columns 3-18.	1-11, 13-16, and 19-26
A	Database PubMed, ID No. 2393392, FREUDENSTEIN et al. mRNA of bovine tissue inhibitor of metalloproteinase: sequence and expression in bovine ovarian tissue. Biochem. Biophys. Res. Commun. August 1990. Vol.171. No. 1. pages 250-256, see Abstract.	1-11, 13-16, and 19-26
A,P	Database PubMed, ID No. 10919256, HENNEBOLD et al. Ovary-selective genes I: the generation and characterization of an ovary-selective complementary deoxyribonucleic acid library. Endocrinology. August 2000. Vol.141. No.8. pages 2725-2734, see Abstract	1-11, 13-16, and 19-26
A	Database PubMed, ID No. 2760883, BEIL et al. Synthesis of polypeptides by the cervix of the baboon (Papio anubis). J. Reprod. Fertil. July 1989. Vol.86. No.2. pages 535-544, see Abstract.	1-11, 13-16, and 19-26
A,P	Database PubMed, ID No. 10830289, HINSHELWOOD et al. A 278 bp region just upstream of the human CYP19 (aromatase) gene mediates ovary-specific expression in transgenic mice. Endocrinology. June 2000. Vol.141. No.6. pages 2050-2053, see Abstract.	1-11, 13-16, and 19-26

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance		
"E"	earlier application or patent published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
	07 JUN 2001
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer Michael Woodward
Facsimile No. (703)305-3230	Telephone No. (703)308-0196

Form PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

Box I   Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:
   because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claim Nos.:
   because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claim Nos.:
   because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II   Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
This includes 4 invention Groups and 3572 sequence species

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest   ☐ The additional search fees were accompanied by the applicant's protest.

   ☐ No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet(1)) (July 1998)

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional serch fees must be paid.
Group I, claims 1-11, 13-16, and 19-26, drawn to nucleic acid molecules, vector molecules and host cells containing said nucleic acids, polypeptides, methods of making said polypeptides and method of detection using said nucleic acids and polypeptides.
Group II, claim 12 and 28, drawn to antibodies and method of treatment using composition comprising said antibodies.
Group III, claims 17-18, drawn to methods of indentifying a binding partner to a polypeptides.
Group IV, claim 27, drawn to method of treatment using composition comprising polypeptides.

The inventions listed as Groups I-IV do not relate to a single inventive concept under PCT Rule 13.1 because, udner PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I encompasses nucleic acids, polypeptides expressed thereby, vectors and host cells containg same, respectively, and methods of making as well as the first method of use of this jubject matter. Groups II-V all are directed to different special technical features as summarized as follows: Group II is directed to an antibody and method of treatment using same, which antibody undergoes recognition and binding reactions wherein what is bound is different from what is bound by the compositions of Group I. For example, the polypeptides of Group I do not bind the polypeptides of Group I as the antibody of Group II does. Identification of binding partner and treatment are clearly different special technical features from detection. Group III is directed to the identification of a binding partner of a polypeptide, which is not identified in any of the other Groups and thus clearly contains its own special technical feature. Group IV is directed to treatment, which is a clearly different methods than the methods in the other Groups. Thus, in summary, each of Groups I-IV are directed to different special technical features and thus support this lack of unity.

Additionally, each of the claims is directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for more than one species to be searched, the appropriate additional search fees must be paid. The species are as follows: The claims include a series of polynucleotides and the polypeptides encoded thereby as representde by the sequences of SEQ ID Nos: 1-1786, and 3573-5358. Each of these polynucleotide sequences encodes a separate polypeptide and thus represent a separate gene. Therefore, each of these genes defines its own special technical feature. In summary, one species is a gene represented by one polynucleotide sequence and one polypeptide sequence encoded thereby.

(51) International Patent Classification[7]: C07H 21/04, C12N 15/11, 15/63, 15/70, 15/82, 15/85, C07K 14/00

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09/598,042	9 July 2000 (09.07.2000)	US
09/620,312	19 July 2000 (19.07.2000)	US
09/653,450	3 August 2000 (03.08.2000)	US
09/662,191	14 September 2000 (14.09.2000)	US
09/693,036	19 October 2000 (19.10.2000)	US
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(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier applications:
US	09/488,725 (CIP)
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Filed on	19 October 2000 (19.10.2000)
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Filed on	29 November 2000 (29.11.2000)

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

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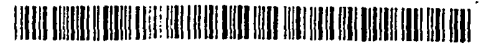
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(54) Title: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES

(57) Abstract: The present invention provides novel nucleic acids, novel polypeptide sequences encoded by these nucleic acids and uses thereof.

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Filed on	29 November 2000 (29.11.2000)

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(74) Agent: ELRIFI, Ivor, R.; Mintz. Levin. Cohn. Ferris, Glovsky. and Popeo, P.C., One Financial Center, Boston, MA 02111 (US).

(81) Designated States (national): AE. AG. AL. AM, AT. AU. AZ. BA. BB. BG. BR. BY. BZ, CA. CH. CN. CR. CU. CZ. DE. DK. DM, DZ. EE. ES. FI, GB. GD. GE. GH. GM. HR. HU. ID. IL. IN. IS. JP. KE. KG. KP. KR. KZ. LC, LK. LR, LS. LT. LU, LV. MA. MD. MG. MK. MN. MW. MX. MZ, NO. NZ. PL. PT. RO. RU. SD. SE. SG. SI. SK, SL. TJ. TM. TR. TT. TZ, UA. UG. US, UZ. VN. YU. ZA. ZW.

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(54) Title: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES

(57) Abstract: The present invention provides novel nucleic acids. novel polypeptide sequences encoded by these nucleic acids and uses thereof.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/34263

A.	CLASSIFICATION OF SUBJECT MATTER
IPC(7)	: C07H 21/04; C12N 15/11, 15/63, 15/70, 15/82, 15/85; C07K 14/00
US CL	: 536/23.1; 435/320.1, 455, 468, 530/300, 350

According to International Patent Classification (IPC) or to both national classification and IPC

B.	FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
    U.S. : 536/23.1; 435/320.1, 455, 468, 530/300, 350

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
MEDLINE, EAST

C.	DOCUMENTS CONSIDERED TO BE RELEVANT	
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WAJIMA et al. The cDNA cloning and transient expression of an ovary-specific 17beta-hydroxysteroid dehydrogenase of chickens. Gene. 1999, Vol.233, pages 75-82	1-11, 13-16, and 19-26
A	US 5,175,095 A (MARTINEAU et al) 29 December 1992 (29.12.1992), see especially columns 3-18.	1-11, 13-16, and 19-26
A	Database PubMed. ID No. 2393392, FREUDENSTEIN et al. mRNA of bovine tissue inhibitor of metalloproteinase: sequence and expression in bovine ovarian tissue. Biochem. Biophys. Res. Commun. August 1990. Vol.171. No. 1. pages 250-256, see Abstract.	1-11, 13-16, and 19-26
A,P	Database PubMed. ID No. 10919256, HENNEBOLD et al. Ovary-selective genes I: the generation and characterization of an ovary-selective complementary deoxyribonucleic acid library. Endocrinology. August 2000. Vol.141. No.8. pages 2725-2734, see Abstract.	1-11, 13-16, and 19-26
A	Database PubMed. ID No. 2760883, BEIL et al. Synthesis of polypeptides by the cervix of the baboon (Papio anubis). J. Reprod. Fertil. July 1989. Vol.86. No.2. pages 535-544, see Abstract.	1-11, 13-16, and 19-26
A,P	Database PubMed. ID No. 10830289, HINSHELWOOD et al. A 278 bp region just upstream of the human CYP19 (aromatase) gene mediates ovary-specific expression in transgenic mice. Endocrinology. June 2000. Vol.141. No.6. pages 2050-2053, see Abstract.	1-11, 13-16, and 19-26

☐ Further documents are listed in the continuation of Box C   ☐ See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance		
"E"	earlier application or patent published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
	0 5 SEP 2001
Name and mailing address of the ISA/US	Authorized officer
Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Michael Woodward
Facsimile No. (703)305-3230	Telephone No. (703)308-0196

Form PCT/ISA/210 (second sheet) (July 1998)

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claim Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claim Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
This includes 4 invention Groups and 3572 sequence species

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-11, 13-16, and 14-26

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet(1)) (July 1998)

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional serch fees must be paid.
Group I, claims 1-11, 13-16, and 19-26, drawn to nucleic acid molecules, vector molecules and host cells containing said nucleic acids, polypeptides, methods of making said polypeptides and method of detection using said nucleic acids and polypeptides.
Group II, claim 12 and 28, drawn to antibodies and method of treatment using composition comprising said antibodies.
Group III, claims 17-18, drawn to methods of indentifying a binding partner to a polypeptides.
Group IV, claim 27, drawn to method of treatment using composition comprising polypeptides.

The inventions listed as Groups I-IV do not relate to a single inventive concept under PCT Rule 13.1 because, udner PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I encompasses nucleic acids, polypeptides expressed thereby, vectors and host cells contaiing same, respectively. and methods of making as well as the first method of use of this jubject matter. Groups II-V all are directed to different special technical features as summarized as follows: Group II is directed to an antibody and method of treatment using same, which antibody undergoes recognition and binding reactions wherein what is bound is different from what is bound by the compositions of Group I. For example, the polypeptides of Group I do not bind the polypeptides of Group I as the antibody of Group II does. Identification of binding partner and treatment are clearly different special technical features from detection. Group III is directed to the identification of a binding partner of a polypeptide, which is not identified in any of the other Groups and thus clearly contains its own special technical feature. Group IV is directed to treatment, which is a clearly different methods than the methods in the other Groups.Thus, in summary, each of Groups I-IV are directed to different special technical features and thus support this lack of unity.

Additionally, each of the claims is directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for more than one species to be searched, the appropriate additional search fees must be paid. The species are as follows: The claims include a series of polynucleotides and the polypeptides encoded thereby as representde by the sequences of SEQ ID Nos: 1-1786, and 3573-5358. Each of these polynucleotide sequences encodes a separate polypeptide and thus represent a separate gene. Therefore. each of these genes defines its own special technical feature. In summary, one species is a gene represented by one polynucleotide sequence and one polypeptide sequence encoded thereby.

Form PCT/ISA/210 (extra sheet) (July 1998)